

SPRING 1953

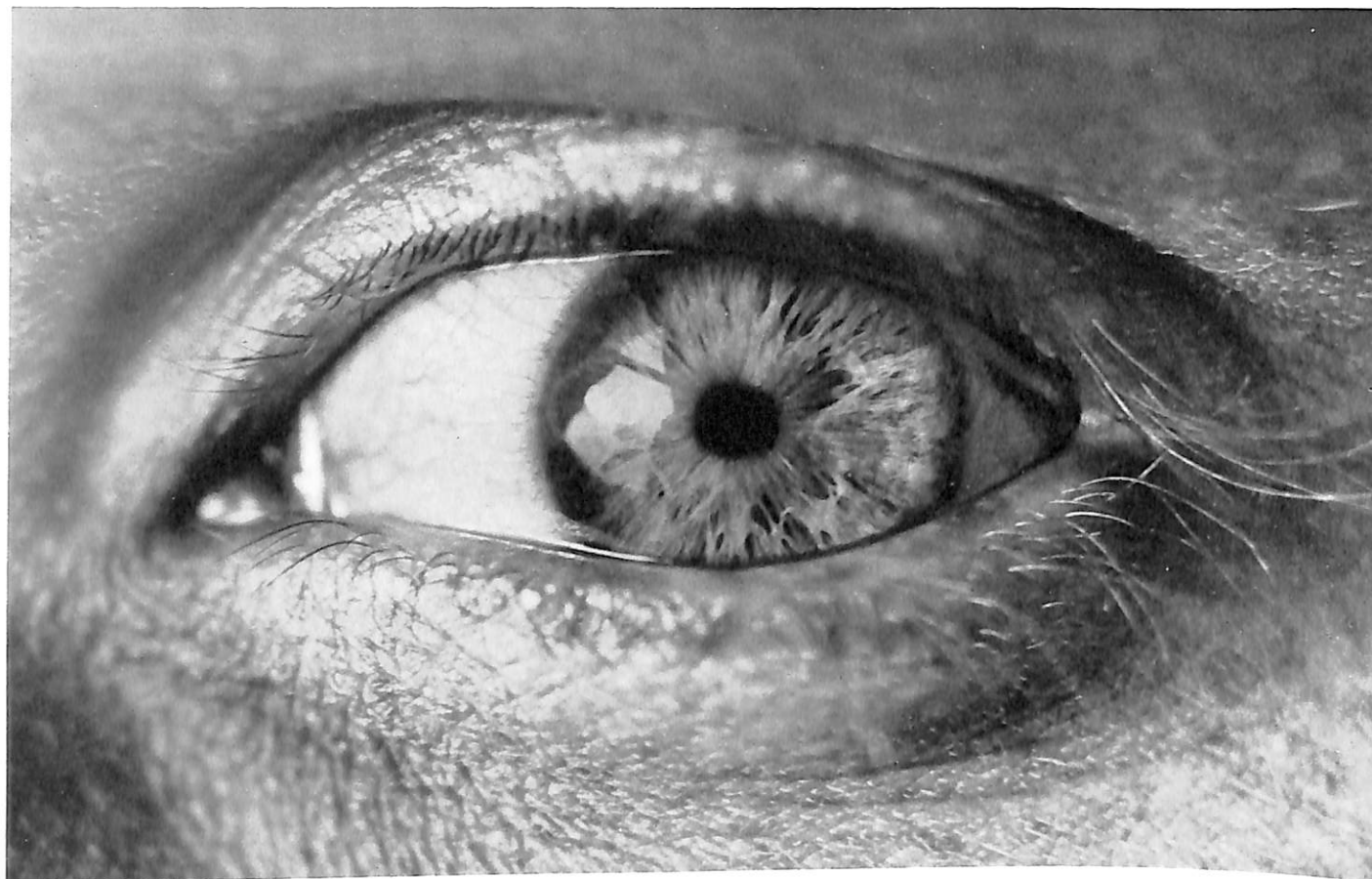
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VOL. 6 NO. 1

# *Leica* photography







A LEICA PHOTO

# Leica®

## camera with a hundred eyes

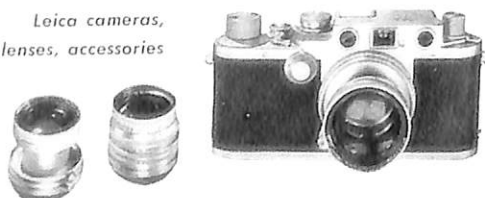
Each Leica lens, faultlessly constructed, fits any Leica camera. Each has its own focusing mount and is fully color corrected. From the wide-angle 28 mm Hektor f/6.3 to the 400 mm Telyt f/5 telephoto, all are designed to give maximum sharpness without distortion over the entire image area.

All current Leica lenses are factory coated to reduce internal reflections, lens flare and image haze.

The chart shown describes briefly some uses of Leica's precision lenses—totaling, through all stops, over a hundred "eyes." For fuller details on how to get the most out of your Leica, with lenses that best meet your needs, be sure to see your local Leica dealer.

E. LEITZ, INC., NEW YORK

Leica cameras,  
lenses, accessories



Type of Work	Lens of Short Focal Length	Lens of Standard Focal Length	Lens of Long Focal Length	Remarks
Candid and Snapshots	Summaron 35 mm	Elmar or Summitar 50 mm	Elmar 90 mm	
Technical	Summaron 35 mm Hektor 28 mm	Elmar or Summitar 50 mm	Elmar 90 mm	
Advertising	Summaron 35 mm Hektor 28 mm	Elmar or Summitar 50 mm	Elmar 90 mm	
Landscape	Summaron 35 mm Hektor 28 mm	Elmar or Summitar 50 mm	Elmar 90 mm	
Travel Pictures	Summaron 35 mm Hektor 28 mm	Elmar or Summitar 50 mm	Elmar 90 mm	
Reproductions	Summaron 35 mm	Elmar 50 mm	Hektor 135 mm	With fine-grain film
Sports	Summaron 35 mm	Summitar or Summarit 50 mm	Summarex 85 mm	
Press Photography	Summaron 35 mm	Summitar or Summarit 50 mm	Summarex 85 mm	In special cases also Hektor 135 mm or Telyt 200 mm or Telyt 400 mm
Portraiture		Summitar or Summarit 50 mm	Elmar 90 mm or Summarex 85 mm	
Still Life		Elmar 50 mm	Elmar 90 mm or Summarex 85 mm	
Instantaneous Exposures in Artificial Light		Summitar or Summarit 50 mm	Summarex 85 mm	With high-speed films
Stage Photos		Summitar or Summarit 50 mm	Summarex 85 mm	
Interiors	Summaron 35 mm Hektor 28 mm	Elmar, Summitar or Summarit 50 mm	Summarex 85 mm	
Architecture	Summaron 35 mm Hektor 28 mm	Elmar 50 mm	Elmar 90 mm Hektor 135 mm Telyt 200 mm	
Nature Photography			Hektor 135 mm Telyt 200 mm Telyt 400 mm	

# Leica photography

SPRING 1953

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VOL. 6 NO. 1

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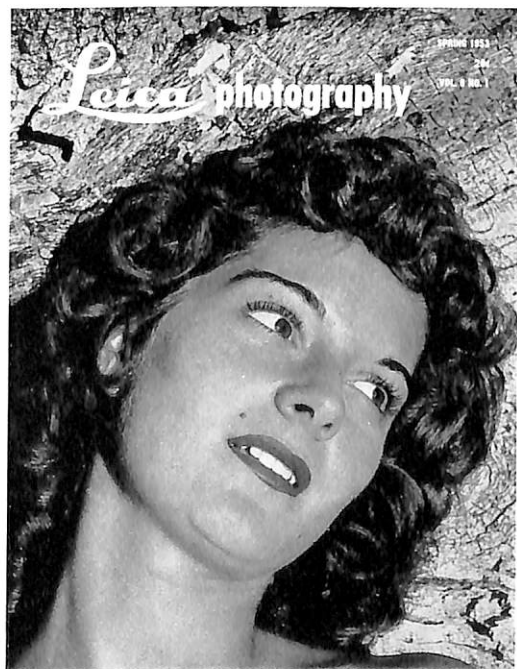
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(Cover) From a Kodachrome by Curtis E. Moussie, North Stonington, Conn. Leica IIIIf with Elmar 90mm. lens, 1/30th second, at f/8.

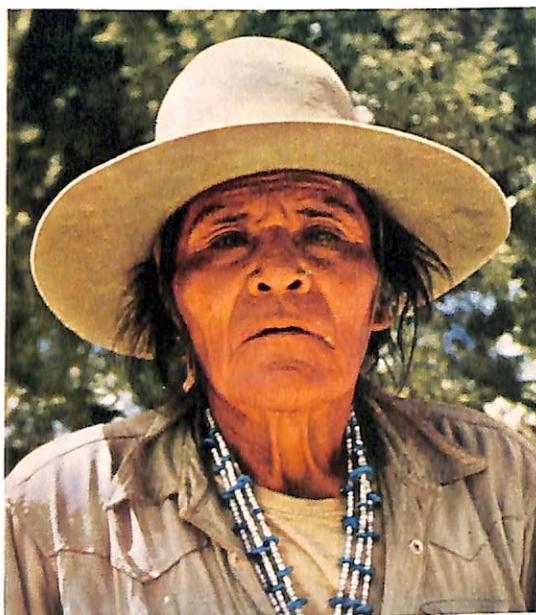
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The editor will be pleased to consider original articles and photographs on Leica camera photography. All manuscripts should be accompanied by stamped, self-addressed return labels.

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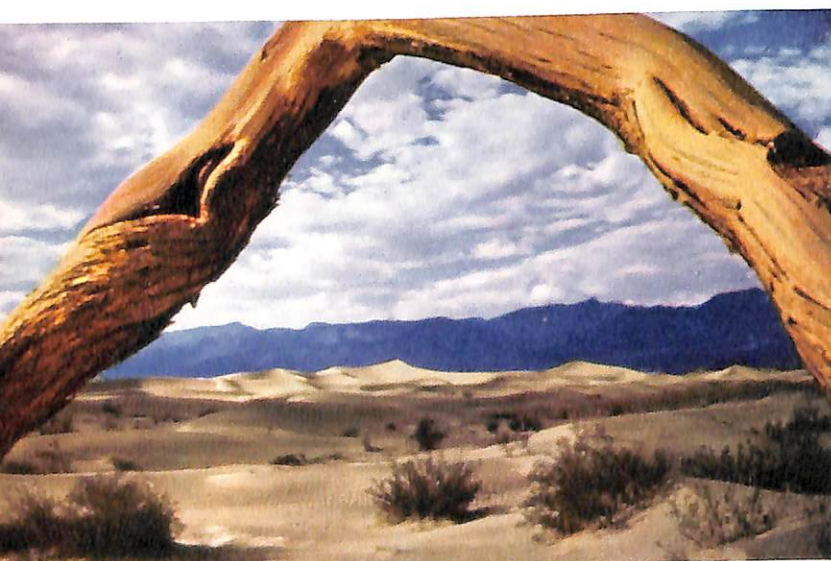


Navajo medicine man

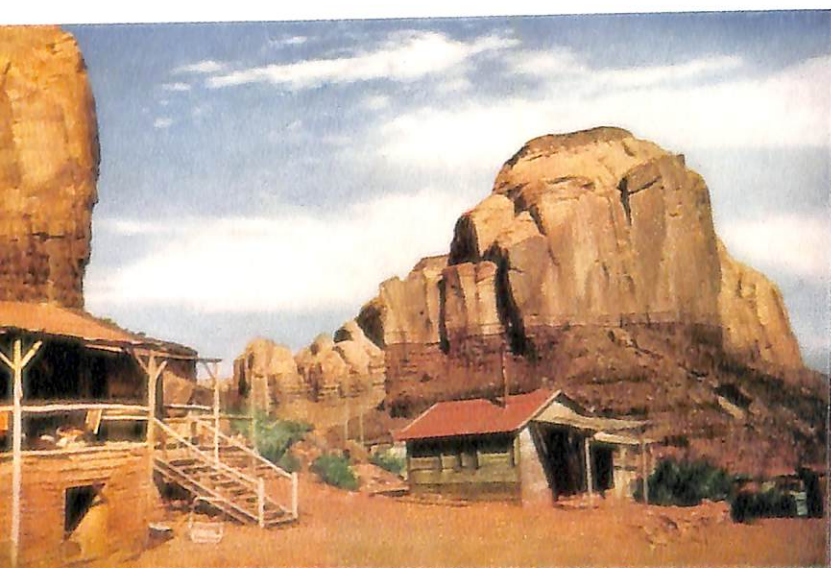


## LEICA IN THE DESERT

by **Louis G. Kirk, National Park Ranger**  
**Organ Pipe Cactus National Monument**  
**Ajo, Arizona**



Death Valley sand dunes



Gouldings' trading post, in Monument Valley

The southwest deserts hold many challenging and unique opportunities for the serious Leica enthusiast. Few regions on earth offer such bold, colorful landscapes or such a variety of subject matter. Here are broad valleys shimmering in 120° weather while ringed by towering snow-capped mountains; expanses of softly rolling sand dunes set against the crisp lines of sheer canyon walls; places where the parched earth seems to have never known moisture but then again has bubbling springs and cascading streams. It's all in knowing how and where to look.

And that's what I have been doing these years of living in the desert—looking into its back corners, becoming acquainted with its scenes and moods, making use of the picture opportunities afforded by the marked contrasts of the Southwest. A Leica outfit is ideal under these demanding and varying circumstances.

For my purposes, two Leica boxes (one for color and one for black-and-white) with a single set of lenses have proven highly satisfactory. The splendid quality and color rendition of the Summarit f/2, 50mm. lens makes it well suited for general use in middle-distance pictures where normal perspective is desired. Long-focus lenses are indispensable for spanning the immense distances visible from numerous vantage points in the mountains where it is possible to see well over a hundred miles. For shots emphasizing a portion of the vista, the Hektor 135mm. and the Elmar 90mm. give ample selection, while to record the sweeping panorama, the Summaron 35mm. is used with a Leitz polarizing filter to cut haze and enhance sky effects when shooting color, and a yellow or red filter for black-and-white. The extreme depth of field of this lens permits striking composition, with everything from a bush or person in the immediate foreground to the mountains on the distant horizon in perfect focus.

The wide-angle lens comes into its own particularly in the narrow gorges that commonly slash desert moun-



tains to such depths. In any number of places are abandoned mines with equipment and houses left just about as they were when men walked off and left them. In others are flowing streams bordered by tall cottonwoods and choked with watercress. In one or two may even be found struggling ranches with the rocky soil of handkerchief-sized fields under cultivation. It somehow seems especially important to capture these scenes because so few people realize that often there is life and water in the canyons of barren desert mountains. Yet without the advantages of the Summaron's angle of view, the scenes could not be recorded properly.

A wide variety of equipment is necessary if one is going to be prepared to meet any photographic task in this rugged section of the globe. A press camera user would find himself so burdened by bulk and weight that he would need a pack burro. But using Leitz equipment, I carry two cameras, four lenses, Imarect Finder, Leica-Meter, 252 exposures of film (in Leitz cassettes) as well as miscellaneous items in a bag measuring only 8x6x4 inches. The compactness and lightness of this outfit make a photographic hiking and camping trip a real pleasure.

When on saddle trips it is not always practical to stop for pictures without becoming a bother to the remainder of the trail party. The choice then is to give up the idea altogether or to shoot from horseback. My solution has been to pre-set the 35mm. Summaron lens to 1/200 of a second, a corresponding stop opening (according to meter reading), and a range predetermined from the depth-of-field scale. The procedure is quick and easy, gives maximum depth-of-field, and the only thing left to do is remember the minimum distance required for a sharp picture. (At f/8 everything will be in focus from 7½ feet to infinity.)

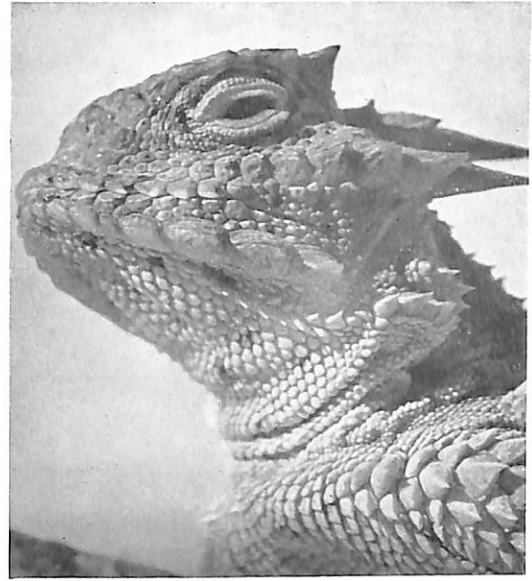
To any outdoorsman wildlife shots offer real thrills. The southwest deserts, far from being the lifeless wastelands some suppose them, have a range of animals running the gamut from wild burros down to kangaroo rats. There is an abundance of insects. For the shy large animals, the Hektor 135mm. lens is ordinarily best because it "brings them up" so well. However, occasionally the Elmar 90mm. is more desirable due to its greater depth of field.

For the rapid taking of a series of pictures, I have developed a technique of advancing the film by drawing the index finger of my right hand across the knurled winding knob, (rather than gripping it between thumb and finger) thus facilitating quick shooting while keeping the camera steady and in position all the time.

For smaller animal life, the Summitar 50mm. opens up the whole fascinating field of macrophotography when supplemented by a Nooky for rodents and reptiles and by a Focalslide plus extension tubes for insects.

An interesting subject is Death Valley, California, home of a band of Shoshone Indians through untold centuries although little is known of them or their cultural patterns. The Shoshones are the most reticent sort of people and, consequently, the real life of the group has never been studied or photographed even though the old manners and customs are rapidly disappearing. Here's where the Leica comes in.

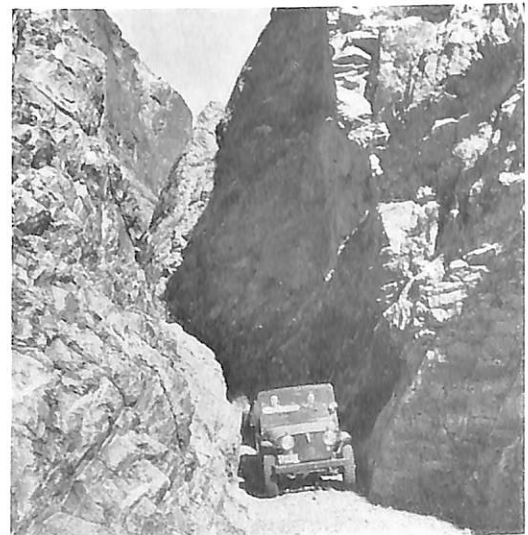
Through a prolonged and often trying process, my wife succeeded in establishing contact with several



Horn toad



Desert mountains of Death Valley



Desert canyon

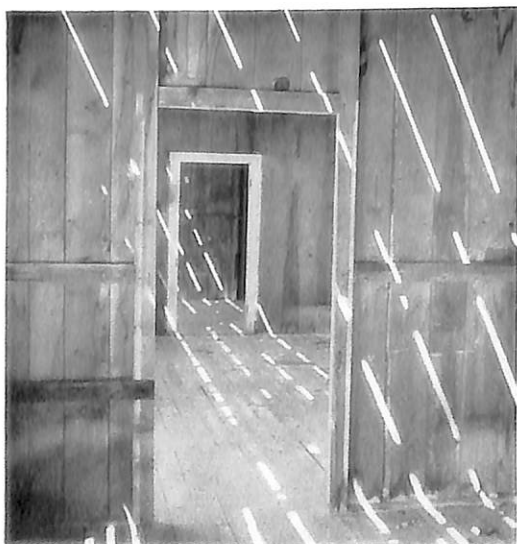




Shoshone basketmaker



Shoshone craftswoman



Interior of deserted miner's cabin

members of the tribe. She showed them pictures of other Indian people and finally gained permission to photograph some of the Shoshone women at their work. We realized that she was the only one who could get these particular pictures, for the shy women would not tolerate a stranger, especially a man. I handed her the Leica Manual, and when she had read it, I got out the Leicas and had her practice diligently. Death Valley weather is usually sunny and bright (in one year as many as 312 clear days were recorded), so lighting conditions were fine on the appointed day, and Ruth obtained an excellent series of an old woman working on one of the fine baskets which have earned the Shoshones the reputation of being just about the world's best basket makers. Without a camera capable of quick and easy operation the task would have been impossible for my wife. And if it weren't for the fact that the Leica is so small and unobtrusive the Indian would have been too distracted to continue her work.

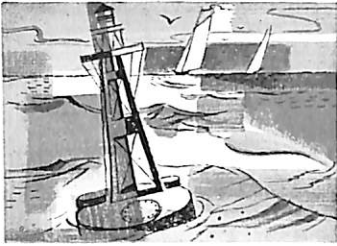
It would not have been possible to get these rare Indian photos without the advantages of the Leica and, without another Leitz product, they would not have come up to their full potentialities. With the Focomat Ic enlarger, it was a simple matter to crop and blow up so as to compose the finished product to best advantage. The Focomat is a real joy to use. Here in the desert, where terrific winds often swirl up great dust clouds, another feature of the Focomat that is appreciated is the glassless carrier and the way the condenser lowers right down on the film so no harmful particles can get on the negative once it is in the enlarger. To combat the dust problem in the field, I carry a rubber ear syringe to blow dust from lenses rather than run the risk of abrasion by wiping gritty surfaces even with the best tissue. As a further precaution, I keep on a skylight filter to protect the lens from blowing sand.

Photo equipment should be kept in the coolest place possible during the long hot months. (Closed up in a car's glove or luggage compartment cameras and film are subject to baking at temperatures of 160°F and over.)

The most dramatic shots are usually right after a storm when the atmosphere is washed clean and the clouds are particularly striking. Late afternoon and early morning are the best times of day because then the low angle of the sun's rays emphasizes the rough character of the land, showing up its relief.

The impression that all desert country is barren and monotonous is a false one. Many who are unfamiliar with this type of country, that covers such a vast portion of the southwest think of it as only a sandy waste, but there is so much more. By gathering available information and selecting the more interesting areas, the desert's charm and diversity are discovered in ways especially challenging to both photographer and equipment. Desert elevation extremes run from more than 200 feet below sea level in some sections to over 10,000 feet above sea level in numerous mountain ranges. Temperatures go up to 150° out in the sunshine of valleys and down to below zero on the mountain tops. With contrasts such as these, quality, precision equipment is required to obtain optimum results, while to withstand the rugged country sturdy construction is a must. Leitz equipment really fills the bill. ♦





## LEICA ABOARD

by Les Allen, Sausalito, Calif.



Some of our best Leica photographs will be taken on a rough day. This was made as the yacht pounded into a choppy sea; brisk wind.

“A hand for the ship and a hand for yourself” is an old sailor’s proverb, but that leaves the yachtsman photographer in a considerable predicament since he is going to need at least one of those hands, and preferably both, for his camera.

Whether he zips an outboard motor boat across an inland lake, power cruises on the thousands of miles of waterways which vein the continental United States or thrashes to windward aboard a blue water ketch,

the amateur sailor usually is carrying a camera with him to record the adventure. But whether he brings home a pleasing a group of photographs depends in large measure upon the camera he has used.

To safely spare that hand for the ship or the one for himself long enough to get the photograph, and avoid becoming a wet sailor and a disgruntled photographer, he must be equipped with a camera that meets these challenging requirements:



It must be compact, sturdy, and light in weight. It should have a neck strap for ease of carrying while performing other duties aboard ship and an Eveready case to protect it against hard knocks and dampness which are a part of sailing.

The camera must be so designed that it is quickly manipulated, for many of the finest picture opportunities are presented to the sea-going photographer for only a fleeting instant.

A highly efficient eye-level viewfinder is essential, so that the photographer can wrap his arms around a shroud or a mast and bring the camera easily to his eye while steadying himself against a sudden pitch of the deck. It is practically impossible to hook an arm around a mast or stay and successfully aim any other type of finder. The camera held at eye-level can turn and move with the photographer's head and wrists, but just try to aim a waist-level reflex which requires that the entire body swing with the camera to keep the subject in the ground glass, and requires too that the body swing in the opposite direction from the action of the image.



Smooth sailing and a pleasant perch on the bowsprit make a perfect day at sea. This Leica shot was made at f 12.5 at 1/200th.

The camera must be capable of many exposures on one roll of film to keep at a minimum the necessity for reloading on deck, exposed to wind, sun and spray, which can easily fog the film or penetrate the interior of the camera with possible damage to the shutter or lens.

Provision for interchanging of lenses is important, for many objects and scenes which the photographer aboard a pleasure craft may wish to record are at a distance requiring a telephoto lens. If the photographer is going to shoot people and activity on deck, or in the usually restricted quarters below, it is also useful to be able to switch to a wide-angle lens, as his ability to move



The Leica caught this ocean cruiser silhouetted against the sun. Only 30 feet long, this yacht has sailed three times from San Francisco to Hawaii, Tahiti, the Marquesas and back.

back from subjects aboard a boat is limited. Keeping both near and far objects in focus is a continual problem if the photographer is going to include a part of his boat in the picture to give scale and perspective to a distant object.

Filters and sunshades which can be quickly and firmly attached to the lens are needed. The sunshade, particularly, is an essential item, not only to eliminate stray light, but to give added protection to the lens from drops of water.

It is not by chance that the Leica fits the above qualifications for a yachtsman's camera to a "T". In twenty years of yachting I have used many cameras, from 4x5 press boxes, to 2 1/4 x 2 1/4 reflex, to several types of 35mm., and finally turned to the Leica as the finest camera available for the trying conditions under which one works aboard a small boat. As a result of this experience I have used the Leica exclusively since World War II for all marine work.

Several of the unique features of the Leica put it in a class by itself for photography on the water. First, of course, is its compactness, very light weight and subsequent lack of bulk in film and accessories — no small advantage when one is trying to stow six people with their gear and food aboard a 35-foot boat.

Next is the fact that only the baseplate is removed to change film, exposing the absolute minimum of the interior mechanism and protecting the inside lens surface from the spray and dampness which must always be reckoned with at sea.





Sailors scramble aloft to the spreader of a big yacht. Zone focusing made possible fast shooting of this photo, one of an action sequence.

The fine — and inexpensive (\$10.20) — Leica 50mm. brilliant optical finder is one of the most important accessories I have for yachting photography. I use it with both the 50mm. Elmar f/3.5, and the 50mm. Summitar f/2 lens on my Leica. I find it gives a brilliant and full size image in the finder and allows me to follow an approaching boat or scene before it enters the etched frame.

Another essential accessory for photography on the water is an accurate light meter. Although I have used another meter with great satisfaction for years, I have added a Leica-Meter to my marine equipment, as it can be inserted in the clip on the Leica, eliminating the need to pull the meter from one's pocket. Open the case, take a reading and then repeat the procedure to safely stow the meter away. With the meter on the camera a reading can be taken immediately before the scene to be photographed slips astern.

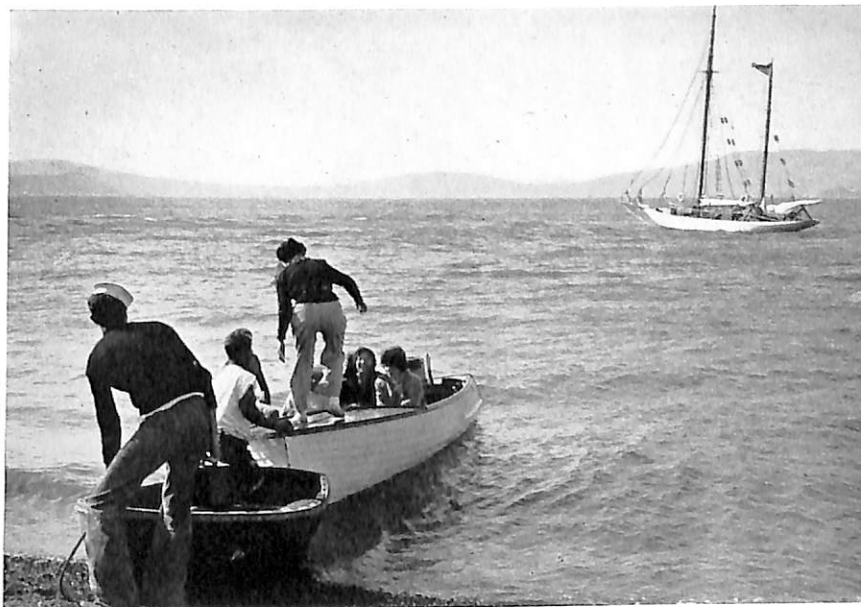
On the water, I have found that a meter reading should be trusted over one's "eye" judgment of the intensity of light. Visual judgment of light intensity can be very misleading, as was confirmed for me on a recent inland cruise. The day was overcast, without direct sunlight, and seemed to me to be rather dull. The meter, however, gave a reading of 600 to 800 when pointed at the scenes to be photographed on the opposite bank of the river. I made the error of discounting this and, unfortunately, followed my own judgment with the result that normal development produced a very heavy set of negatives. My eye had confused lack

of contrast with lack of brightness.

With the light intensities of between 400 to 800 so commonly encountered while sailing, I set the Leica shutter at 1/200th to eliminate the effect of any motion on my part, and vary the aperture between f/12.5 and f/16, depending upon the lens being used and the amount of contrast in the subject.

I commonly use zone focusing when photographing subjects at a distance from the boat. By using the depth-of-field scale, excellent definition is assured for even the most distant objects. At the same time the Leica can hold the sharpness of parts of the boat which I may wish to use as a frame for the main subject.

When photographing people aboard a yacht, I shoot rapidly with the Leica to build sequences of pictures, catching the action connected with sailing the boat as it develops. When shooting other yachts and scenes, I often make only one or two exposures, trying to figure ahead as to when the best moment—usually the one when the subject is closest — will occur to press the shutter release.



Near and far subjects are easy for the Leica. Here the sailing party returns to the yacht after an afternoon's exploration ashore.

So to the thousands of Leica owners who will be on or around the water and boats this summer, I say:

Always take your Leica with you.

Protect it from spray and dampness.

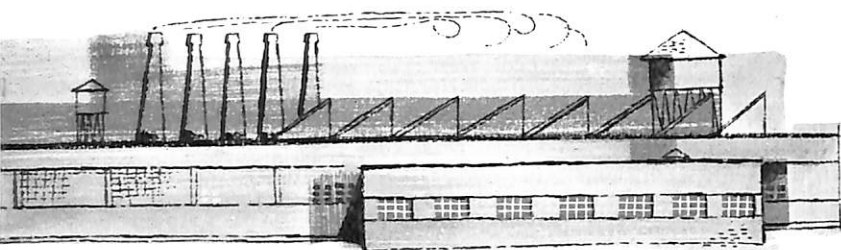
Photograph in all weather — a rough day may give you some of your most exciting shots.

For spectacular effects shoot in the early morning sun or at sunset.

Play safe — always use a neck strap and keep your camera insured.

Enjoy yourself — you're equipped with the finest sea going camera made! ♦





## LEICA PHOTOS FOR PRODUCT PROMOTION

by Hector B. Moore, Supt.  
The Electrical Refractories Co.  
East Palestine, Ohio



Entrance end of kiln

Our firm, The Electrical Refractories Co., which manufactures specially designed refractories for industrial and domestic heating devices, as well as a tough, dense electrical porcelain for use as terminal blocks, needed a pamphlet which would present their story to the trade as briefly, but effectively, as possible. Leica equipment made the job easy.

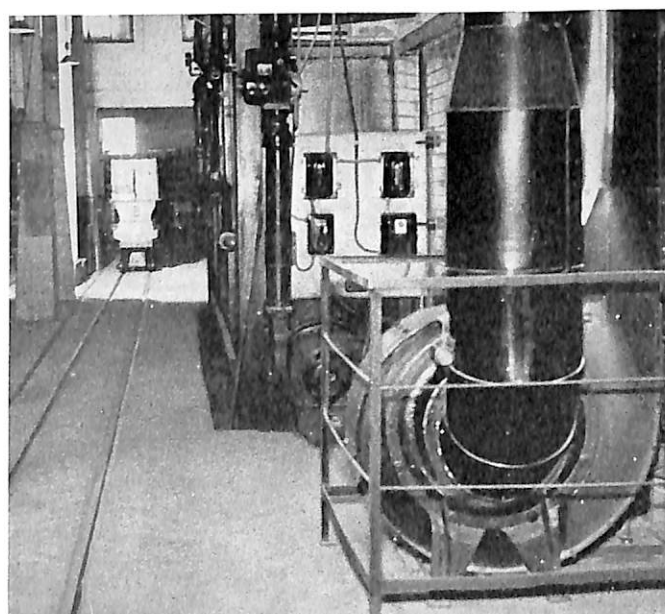
As an amateur photographer for the past three years, I "volunteered" to take the pictures of our products and views of some of our departments.

I started by shooting the various departments. The photos captioned "Entrance and Exit End of Kiln" were taken with a Leica IIIf with Summitar 50mm. f/2 lens, Leica flashgun and an auxiliary flash for fill-in. The shutter was set at Bulb and the lens diaphragm at f/16 (note remarkable depth of field). With flash on the camera, I used a cable release to trip the shutter. With the shutter open (at Bulb), I covered the lens and had an assistant fire the auxiliary flash at three different

distances going away from the camera to equalize the light (naturally, I uncovered the lens when he was ready). The different spots from which he fired are evident in this picture which turned out best over tests of flashing all at once or starting at the farthest distance and working back.

The individual item pictures were all taken with the Leica IIIf, Mirror Reflex Housing, Bellows Device and Hektor 135mm. lens. First, I made a folding stand which opened flat to 30"x60". Therefore, I had a 30"x30" base and, by lifting the second half, had a background 30"x30". The stand was covered with black Indian-head cloth (a cotton material available at dry goods stores and pressed to eliminate all wrinkles) which keeps reflection to a minimum.

I then made a set of round wooden blocks to use as "platforms" for the items. They were cut from various



Exit end of kiln

angles and painted flat black. Round blocks were made because they reflect less than flat or square ones. They did not have to be retouched in the final print since they blended with the background.

For lighting, I used two 100-watt floodlights in reflectors at camera lens level, adjusting to correct shadows, and added a 75-watt overhead spotlight high enough to get rid of the final shadows. The lighting was *most important* in this work because certain items are off-white, others have a light tan glaze, some are light blue-black, and finally we have a light blue-gray coarse material.

I used an ASA 50 tungsten instead of the prescribed 40 and took my reading with the meter held halfway between camera and object (best by test). Found reading to be f/11 at one second. Since the Bellows was racked out to about halfway between 0.4 and 0.5 I used a 2x exposure factor, as indicated on the Bellows, and exposed at f/8, one second. For some objects, I

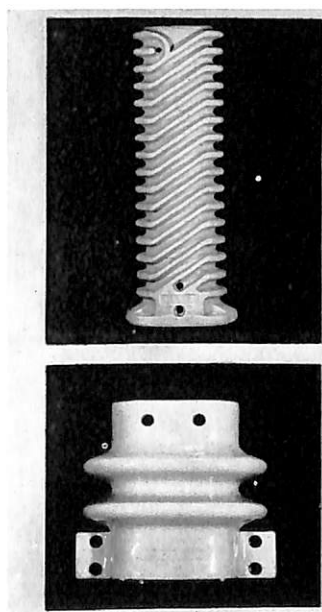


set the Bellows between 0.2 and 0.3, used the factor of 1.5x and exposed halfway between f/8 and f/11 at one second.

For a couple of items I had to set the Bellows at "0". I have taken pictures of broken cross sections of the refractory to compare fractures and used the Bellows at one and found the factor correct. The Bellows, Reflex Housing and 135mm. combination is ideal for this work because there is plenty of room to light the subject without reflections or lights in the way. Another thing I know is that the scales and markings on Leica products are accurate, which is so important in close-up work, particularly photomicrography.

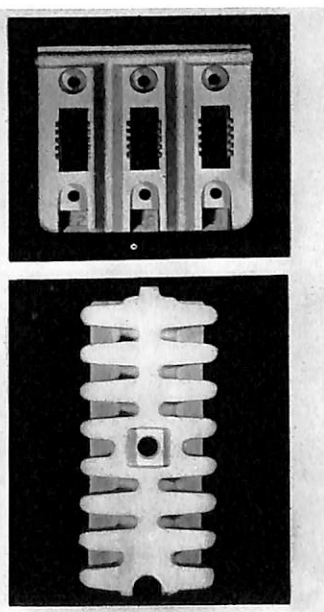
Plus-X film was used. Developed 15 $\frac{3}{4}$  minutes in Microdol. Washed one minute in water containing Fototonic. Fixed 20 minutes in Kodak Acid Fixer, washed  $\frac{1}{2}$  hour then rinsed in water and Fototonic for

Portable heater core



Special porcelain insulator

Arc block



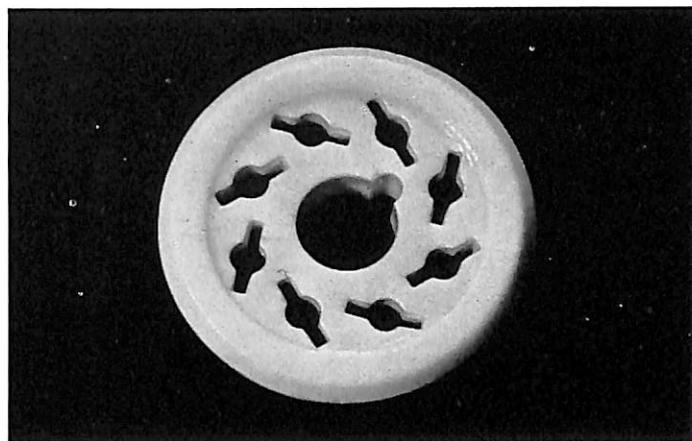
Furnace resistor retainer

11 $\frac{1}{2}$  minutes which dried film evenly—no water marks. Temperature a constant 67°F.

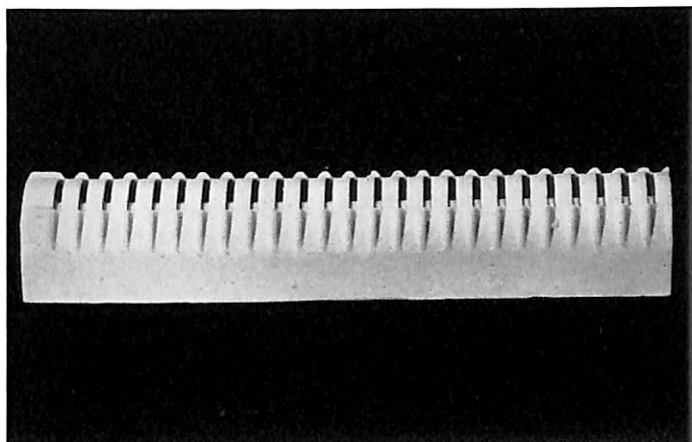
I used Kodabromide F2 and F3 paper, developed in Dektol developer (one part stock solution to two parts water), 11 $\frac{1}{2}$  minutes at 68°F. Then 15 seconds in acetic acid stop 10 minutes in Eastman fix and hardener and wash one hour.

For reproduction purposes, 6 $\frac{1}{16}$ "x9 $\frac{3}{16}$ " enlargements were made of the views in the plant and the item photos were enlarged to 4 $\frac{3}{4}$ "x3 $\frac{1}{8}$ ".

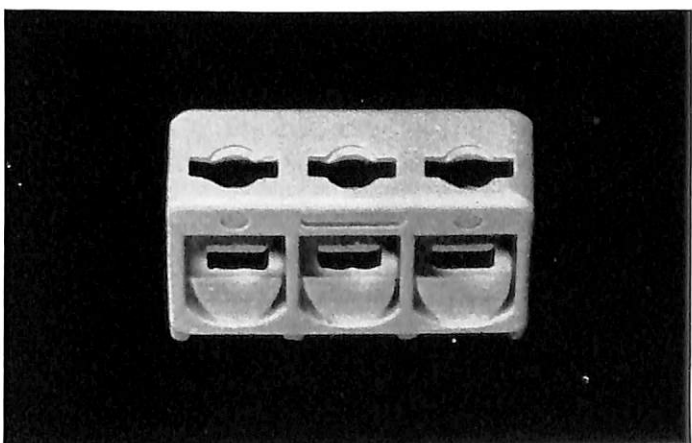
*(Editor's Note: The effectiveness of Mr. Moore's results was the reason for this article. After seeing only the final pamphlet, we requested an article. There is a growing tendency to use more photography in industry. Mr. Moore's methods can be successfully applied in any industry. We welcome other articles along these lines. Use your Leica equipment for business and pleasure!) ♦*



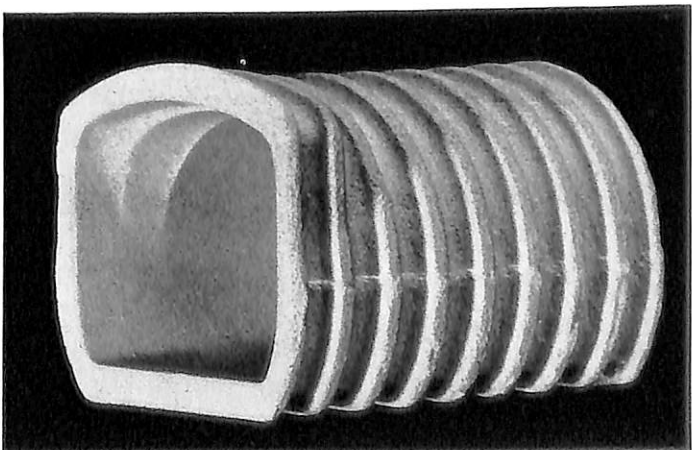
Radio base—Off white



Controller bar—Light tan

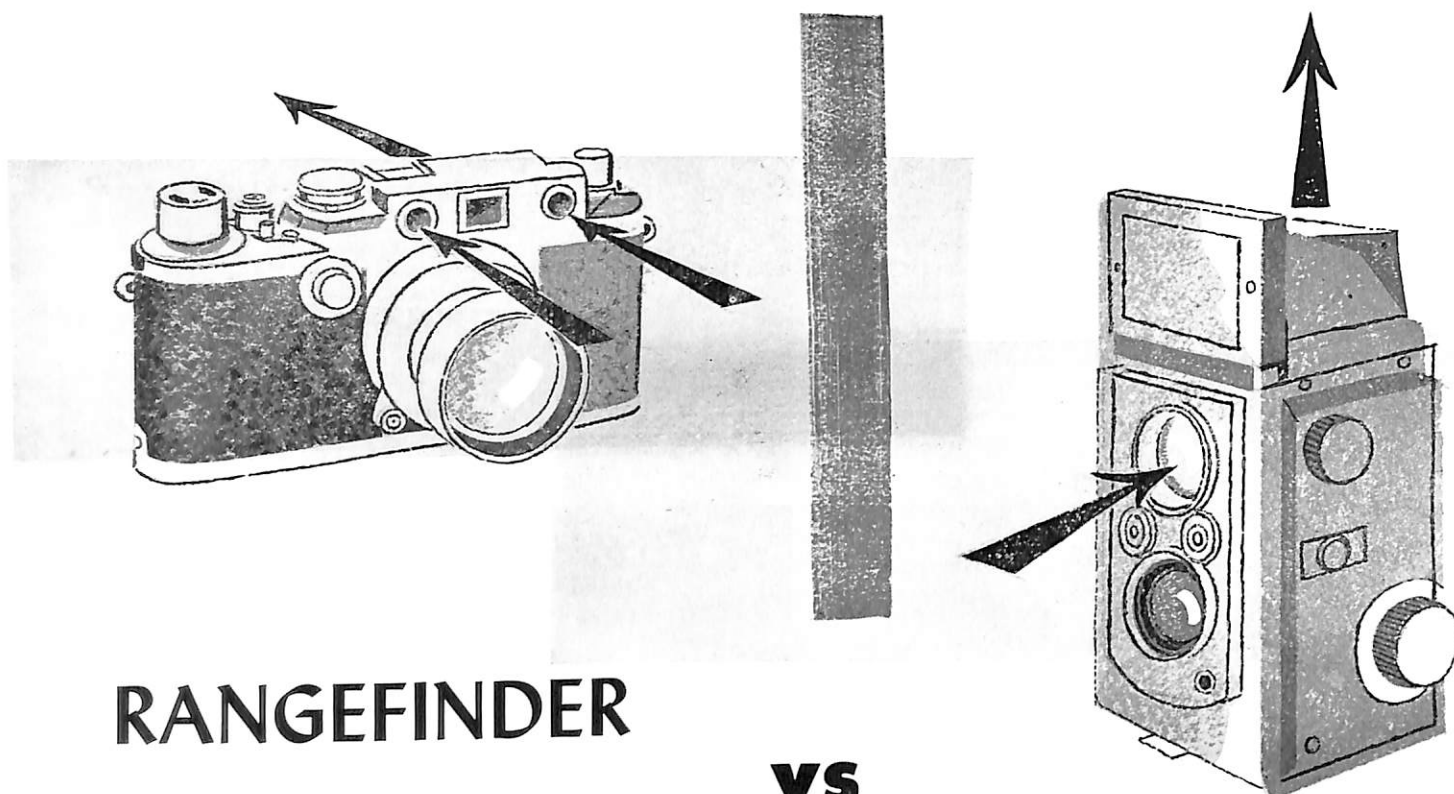


Range terminal block—Blue black



Dental muffle furnace—Blue black





# RANGEFINDER VS GROUND GLASS FOCUSING

by Professor Katherine Chamberlain  
Wayne University, Detroit, Michigan

It has long interested me to observe how casual the average person is when focusing his Leica. He will often take no end of trouble with such things as composition, waiting for the right hour of the day, fine-grain development and careful temperature control. Then he will take a quick look through his rangefinder with implicit faith that reducing the aperture will increase depth-of-field enough to correct all that he has *not* done by his careless focusing.

It is understandable how this idea became prevalent when we remember how long large cameras have dominated the photographic scene and that the eye is, by nature, an imperfect optical instrument. As a result, rules of procedure have been adopted that serve well enough if the negatives are to be contact-printed or moderately enlarged. Under these circumstances, photographers manage to get away with a great deal on the principle that "what the eye can't see, the heart won't grieve over." Negatives made with large cameras do not have to be critically sharp to do well enough for most purposes. Under these circumstances, the image appears reasonably firm because the eye cannot see it well enough, under low magnification, to realize when it is not.

When we use 35mm. cameras, however, and wish to enlarge our negatives five, ten, or fifteen times, the utmost critical definition is needed by anyone who aspires to the distinction of making a precision-built Leica camera do all it can. All of this is not intended as an introduction to a new list of complexities for the

35mm. camera enthusiast. Rather, it is a plea that he merely concentrate a little more on focusing properly and not rely quite so much on reducing the aperture as an excuse for carelessness.

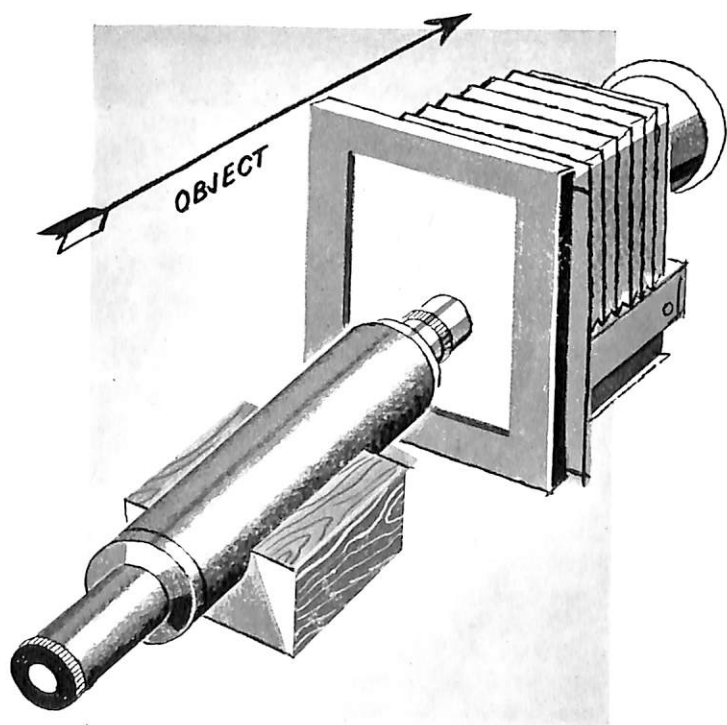
While it is true that using a smaller stop will minimize errors in focusing, it can never eliminate them entirely. Let us suppose that we are taking a portrait, with our subject at a distance of five feet, and focus rather casually so that the plane of sharpest focus is eight inches in front of the eyes. With a 50mm. focal length lens, the eyes would definitely be out of focus at  $f/2$ . At  $f/9$ , their sharpness would be improved, though still unsatisfactory, according to depth-of-field tables. At  $f/12.5$ , such tables indicate that the eyes would be within the range designated as satisfactorily sharp. But the important point to realize is that the plane of sharpest focus is still eight inches in front of the eyes, assuming, as is ordinarily the case today, that there is no change of focus with change of aperture.

The only way to reproduce the eyes with absolute, critical definition is to focus on them exactly and not just somewhere in the vicinity. While the discrepancy may not be noticeable in a small enlargement, it will become increasingly evident when we go to larger ones.

It is true that the utmost in the way of wiry-sharp definition is not usually desirable in a portrait. We who use 35mm. cameras should remember, however, that a five, ten or fifteen times enlargement automatically softens the image by increasing the size of the grain clumps. In addition, faulty focusing will remove detail

we do want, as well as what we do not, and will leave a generally unsatisfactory remnant that is invariably disappointing. We can minimize unwanted detail by careful lighting, moving the camera and lights farther back and using diffusion screens over the lights. The camera must be focused as accurately as possible. The enlarger will soften the image sufficiently to "compensate" for the fact that the lens sees better than we do.

In order to fully appreciate how suddenly the image goes in and out of focus, it is instructive to examine it through a microscope with about 50x magnification. To do this, the ground glass can be removed from a view camera and the image observed as it is magnified by the microscope. It will be found that the image loses its maximum sharpness and becomes definitely inferior when the change of focus is extremely small. This is revealed by the high magnification. That the image appears to pass more gradually into and out of focus, when we observe it with little or no magnification, is an illusion due to our imperfect eyesight.



Use of a microscope to examine the image formed by the lens of a view camera. The ground glass must be removed.

This is not intended to indicate that critical focusing on the ground glass is impossible with the unaided eye, if the image is large enough, but it is intended to urge everyone who attempts it to be sure that his eyesight is adequate. "Graininess" is not necessarily responsible for all the fuzzy images that are attributed to it. At ten or fifteen times magnification, detail that is very slightly out of focus will be definitely unsatisfactory. There are many people who cannot see the critical focal point on the camera ground glass without magnification, or the low power generally supplied on small cameras with ground glass focusing, even though their eyesight is not noticeably defective otherwise.

Three types of focusing models are available in small cameras, single-lens reflex, twin-lens reflex and rangefinder. In the single-lens reflex, a mirror inclined at forty-five degrees reflects the light coming through the taking lens upward so that it is possible to focus the image on a ground glass in the horizontal plane without removing the film. Whenever an exposure is made, the mirror must spring out of the way before the shutter opens so that the image will fall on the film. In the twin-lens type, the time lapse necessary to get this moving mirror out of the way, and other difficulties inherent in moving mirrors, are avoided by providing a viewing lens and a fixed forty-five degree mirror mounted directly above the taking lens. In the more expensive cameras of this type, these two lenses are mechanically coupled so that the taking lens focuses its image on the film exactly as the viewing lens focuses one on the ground glass. *These lenses must be carefully matched in focal length since the image is focused with the one and taken with the other.*

With ground glass focusing, 35mm. cameras provide a very small image that will be difficult to see clearly with low power magnification as ordinarily provided. Often the ground glass on which the image is focused is provided with an Ektalite screen which makes the image brighter, especially at the corners. This screen carries an indented pattern on it consisting of concentric circles. Since this pattern is faintly visible and is superimposed on the focused image, it has a tendency to break up the latter and may make it more difficult to recognize the focal point. *Thus, it is well for the individual to consider carefully whether such a screen will actually help his focusing. A brighter image with a pattern superimposed on it does not necessarily make it easier to recognize the critical focus.* With all reflex cameras, the image is focused on a ground glass in the horizontal plane while the photograph is made on a film in the vertical plane. *These distances must match very exactly if a critical focus is ever to be obtained on the negative except by accident.*

With the single-lens type, much is often made of the fact that the taking lens forms the image and so there is no parallax. This is true, but is of no particular importance except in the case of extreme close-ups. If the taking and viewing lenses of a twin-lens reflex are two inches apart, the viewing lens will include two inches more of the top of the subject and two inches less of the bottom than the taking lens. The discrepancy will always be two inches regardless of distance to the subject and becomes important only when the latter is an appreciable fraction of the whole. Some twin-lens reflex cameras are built with an adjustment to compensate for parallax.

There is another matter, however, with the twin-lens reflex that does deserve careful consideration. A mirror must be used to reflect the image to the horizontal ground glass. This has to move out of the way before a picture can be taken and the time-lapse should be as short as possible. *This mirror, therefore, is a moving part that may be very lightly built and that must move very rapidly. The chance that it may go out of adjustment with repeated use is considerable, to the detriment of focusing.* Owners of this type should have them checked periodically, otherwise, they may



find that their later photographs are not as good as their earlier ones for no apparent reason.

The difficulties inherent in satisfactorily focusing the small images produced by 35mm. cameras has brought about an extensive development of tiny range finders that indicate the correct focus either by producing a match between the two halves of a split image or by superimposing two images (Leica-type). In both types, light from the object enters the rangefinder through two windows that are placed as far apart as is practical. Within the rangefinder, mirrors, prisms or optical wedges are provided so that the user can observe the images produced through the two windows in the same field of view. A rotating part must always be provided so that one of these images can be shifted relative to the other. The distance to the object is directly related to the amount of rotation necessary to make the images match. If such a device is actuated by racking the camera lens in and out, the matching of the images can indicate very accurately when the object is in focus.

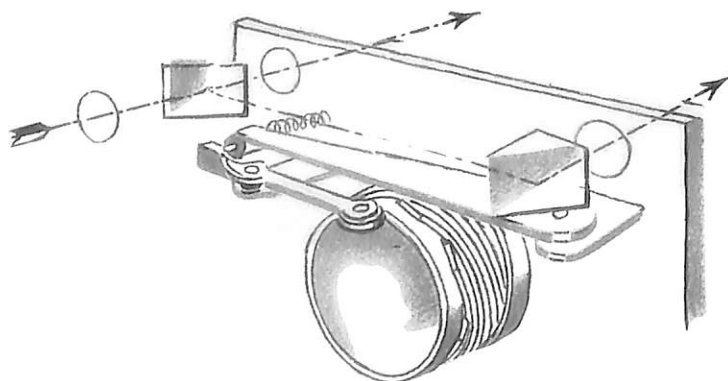
*The great advantage of the rangefinder over ground-glass focusing is that superimposing two images represents a much more obvious act of judgment than a determination of the precise point where a ground-glass image is sharpest, especially when the latter is very small.* Like the reflex cameras, however, these cannot be entirely satisfactory unless they are built with great precision and are so designed that they will stay in adjustment.



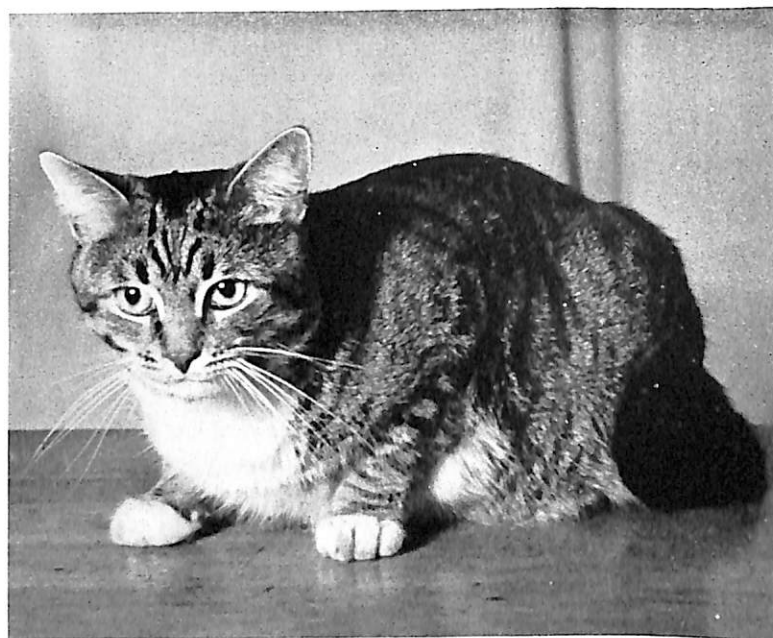
Correct focus



Lens out of focus



The automatic coupling of the Leica camera embodies a micrometer-movement mechanism with two compensating devices of high precision.



10x enlargement of part of a Leica negative. Made with a 2 inch Elmar.

*In selecting one of these, it is well to note particularly the size of the field that is to be matched. If this is too small, mistakes can be made with the split field type by matching parts that do not belong together.* It is also important to notice whether the images are bright enough to be seen by ordinary indoor light. Another item to notice is whether both near and far objects are well defined. Persons wearing glasses should be sure that they are able to get close enough to use the rangefinder properly.

Once having selected such a camera, the owner should practice with it. No one is born with all the skill he needs to use any piece of optical equipment. It is a good plan to study the images formed by the rangefinder very carefully to learn any peculiarities about them, such as the angle at which the camera should be tilted to see the two images best. A good test of proficiency is to focus over and over on the same object and note how close the successive trials come to the same point on the distance scale.

Finally, when a picture is being taken, always concentrate on focusing long enough to be sure that the rangefinder has been set with all possible accuracy. I will venture to predict that this simple precaution will render it unnecessary to make such a scapegoat of graininess. If it does not, have the camera checked by the manufacturer. It is necessary to realize that the enlarger also needs to be very carefully focused. I spent at least five or six hours doing this to my Focomat 1c when I first bought it.

Finally, always use a fine-grain developer and don't overexpose or overdevelop. Some 35mm. cameras cannot do precise work and some owners do not. So before you decide what to do, if you are not entirely satisfied with your pictures, investigate carefully to determine whether the fault lies with you or your camera. Then you will be able to decide on logical grounds whether it will be better to reform the one or exchange the other—if it isn't a Leica. ♦



## Leicavit RAPID WINDER

**H**OW many times have you wished you could wind your camera faster and shoot the second, third or fourth picture in that many seconds? Often a series of pictures taken in rapid sequence marks the difference between a dramatic series of newsworthy pictures and a collection of static record shots. The hit and split-second action of the play at first; centering the ball, the hand-off, the end run and the touchdown; the drama-packed moments when a speeding car leaves the track, flip-flops in the air and smashes on its nose; the fleeting, ever-changing expressions of your child opening gifts. These, and hundreds of sequence picture possibilities are open to the Leica owner when his camera is fitted with the Leicavit Rapid Winder. The entire roll of thirty-six pictures can be exposed in twenty-five seconds or less.

The Leicavit replaces the regular base-plate on the Leica and is left in position at all times. It fits all Leica Cameras having serial numbers higher than 400,000 and no conversions or factory adjustments are necessary. The camera can be wound and used in the normal manner or used as a sequence camera by swinging the Leicavit trigger into position. The Leicavit is sturdily constructed and will give you years of trouble-free service.

### HOW IT WORKS

Load your Leica with a new roll of film, replacing the regular base-plate with the Leicavit. The locking lever of the Rapid Winder must be in the "auf-open" position and the unit mounted on the camera in the same manner as the base-plate. Move the locking lever to the "zu-closed" position. Wind off the necessary safe exposures and set the exposure counter as usual.

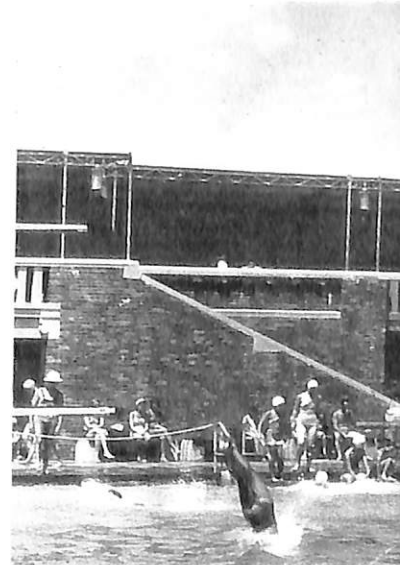
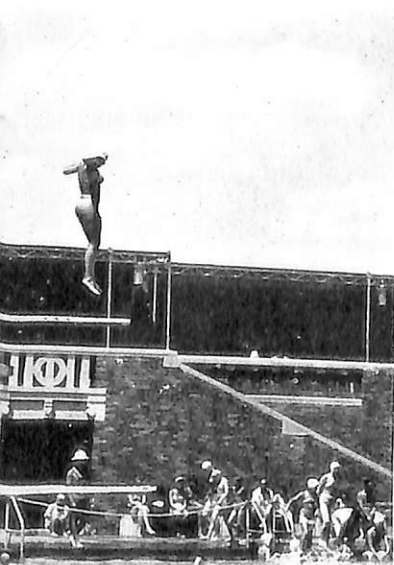
Lock the Leicavit trigger, which is folded in the base, in operating position by lifting it with your fingernail. The trigger is closed by pressing the small button on its left side and folding down.

Wind the Leica in the normal manner, using the camera winding knob. This is necessary only for the first exposure. All subsequent exposures can be made with the Leicavit trigger or the regular winding knob.

After making the first exposure, wind the camera by pulling the Leicavit trigger from right to left as far as it will go and then allow it to return to its original position. Unless this is done the shutter will not be fully wound and will not open when the release button is pressed. If the shutter does not open use the regular winding knob to wind the camera for the next exposure and then use the trigger for subsequent exposures.

When using the Leicavit to wind the camera, the finger which releases the shutter should be held clear of the winding knob and shutter release button. Hold the camera steady and use the faster shutter speeds. If slower speeds are used some camera movement may be evident, especially when taking pictures in rapid sequence.

Hold the camera in the right hand with the left thumb resting against the end of the camera. Operate the Leicavit with the first two fingers of the left hand, using a squeezing action, pressing the thumb and fingers together. Do not jerk the trigger as you will shake the camera and may tear the film perforations. When the film has been completely exposed, rewind in the usual manner. Remove the Leicavit by turning the locking lever from the closed to the open position. When the locking lever is in the closed position it is locked and must be released by pulling down on the knurled button before turning to the open position. ♦





# From Hobby to Profession



photographs by Adrian Siegel  
text by Sophie Siegel  
Philadelphia, Pennsylvania

*(Editor's Note: Mr. Siegel has been a constant contributor to LEICA PHOTOGRAPHY magazine, and he has recently made the transition to the professional ranks. Photography has now become a rewarding avocation in a very tangible sense. Mr. Siegel's formula is still—careful attention to detail, only the best darkroom technique and, as he puts it—"dumb luck when it comes to selling material." There are many amateur hobbyists who are overanxious to sell their work, before getting consistently good results, and we urge them to perfect their overall techniques before bombarding editors with material; which can only result in discouraging rejections.)*

Due to my primary occupation of playing cello with the Philadelphia Symphony Orchestra, I had the opportunity to shoot pictures of famous musicians for five or six years before my ambition to have an exhibition of my photographs was realized in 1943. My photographs went on display with a show of my paintings—another hobby which has not paid off as well.

One night, in 1943, my wife dragged me to an after-concert party for Mr. Toscanini and she bore the brunt of my displeasure when Mr. Toscanini did not show up. She had the last laugh on me, however, for after the party some people we met asked to see my photographs. Mr. Lothar Wolf of "March of Time" suggested that the pictures be shown to LIFE magazine. My dubious reply was cut short by his promise to make an appointment for me.

*This issue's Gravure Section contains a series Mr. Siegel did for Steinway and Sons, piano makers.*

On the day of the appointment, I called the editor every half-hour from 10:00 a.m. until 4:00 p.m. and then at last it was suggested I see another editor who bought my pictures for publication at a date which coincided with the opening of my exhibit at the Philadelphia Art Alliance.

Shortly thereafter, I received a cable from a London agent who had seen the LIFE spread. As a result, my photographs were published in magazines in England, Denmark, Sweden, France, Germany and Switzerland. Since that time, my work has steam-rolled into all of the photographic consumer magazines, HARPER'S BAZAAR, VOGUE, CORONET and NORTE (for South American distribution.) I have authored a chapter in the LEICA MANUAL. The National Broadcasting Company has used my photographs of Toscanini and RCA Victor has been a very good client.



Mr. John Steinway

Two years ago when Steinway & Sons was planning an ad series, the wife of one of N. W. Ayer's copywriters suggested that my pictures be used. I was asked to take my photographs with a large camera, but I used both my Leica and the larger camera. I am very proud to say that the entire Steinway series on pianists, my major photographic job so far, was made from Leica 11 x 14s, chosen over the larger camera's results. It was doubly gratifying all around, since Mr. John Steinway and other members of his family are enthusiastic Leica owners.

I have not been aggressive in pursuing my new avocation, although I have been devoted to it. Having come a long and happy way in photography, I can say I attribute my success to the unusual opportunity of taking the pictures and to recording what I see and feel, to hard work and to just plain "dumb luck." Through it all, I must give full credit to my Leica equipment, which is ideal for natural light photography and makes every job seem easy. ♦



VLADIMIR HOROWITZ







EUGENE LIST







RUDOLPH SERKIN



ALEXANDER BRAILOWSKY



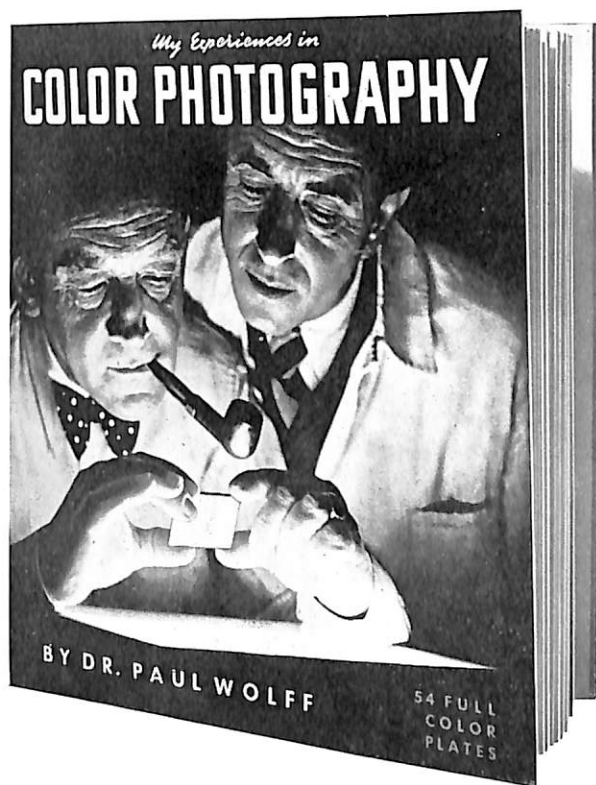






## NOTES AND TIPS

**ON BOOKS . . .** We are pleased to announce the availability, through E. Leitz, of a limited American edition of Dr. Paul Wolff's *MY EXPERIENCES IN COLOR PHOTOGRAPHY*.



Originally issued in Germany, this publication is a distinctive volume. It is a comprehensive guide to color photography by the late, world-famous Dr. Paul Wolff, who first developed 35mm. photography into a "science" and who used the Leica exclusively in his work. The volume is illustrated with an outstanding collection of 54 full page color photographs and has 43 pages of text which cover an extremely wide range of space, including portraits, scenery, industrial and architectural matter. Reproductions were printed in 6 to 8 colors originally in Germany and have never been published before in this country.

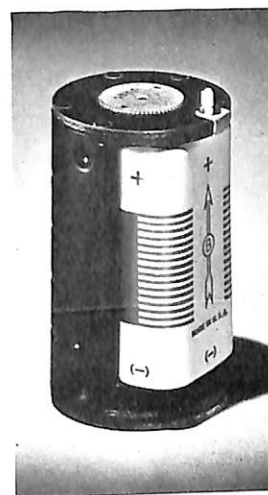
The translation into English and the preface were written by Mrs. Jacob Deschin, Camera Editor of *THE NEW YORK TIMES*.

We heartily recommend this "collector's item" to all Leica owners. It is available at all Leica dealers or direct from E. Leitz, Inc., New York, in limited quantity at \$10.00.

Also worthy of note is, *HOW TO MAKE MONEY WITH YOUR CAMERA* by Leica photographer Harrison Forman, with a foreword by Ivan Dmitri, published by McGraw Hill, 235 pages, 16 pages of illustrations (\$2.95). Recommended for those who are interested in selling material.

**FOR FLASH, TAKE CARE . . .** As we mentioned in the last issue, we have a special flash factor card for the newer model cameras (fast speeds of 1/25, 1/50, 1/75) which is *only* for the cameras with *red* synchro-dial numerals. Owners of other Leica IIIf and IIf cameras should only use the card that says for "Leica IIIf with Black Synchro-Dial Numerals." You will be unable to obtain proper synchronization unless the proper flash factor card is used; so, if you order one through your dealer, be certain it is the one for your camera.

Our Service Department receives many cameras from owners who complain of faulty flash results. Often the flash unit is at fault because of a broken wire or improper contact; so if the difficulty cannot be located, and you do return the camera, please send the flash unit also. Also, make certain the small piece of metal on top of the BC cartridge holder, in the flash gun base, comes in contact with the upper part of the flash unit when the unit is put together. On the newer BC cartridge holder (see photo), this design has been changed to a self-adjusting plunger which eliminates this margin for error.



We are pleased to announce that with the new shutter speeds of 1/25, 1/50, and 1/75, it is possible to use zero delay strobe units at 1/50th of a second with a synchro-dial setting of 20. This will be good news to strobe enthusiasts and we again express our regrets to owners of previous models for our inability to convert the shutter speeds.

### CHANGES IN LEICA PHOTOGRAPHY MAGAZINE

. . . Many of you may already have noticed that this issue does not carry the Dealers' Directory or display advertising of any kind, other than our own. This is a new policy because we want to devote more editorial space to the use of Leica equipment. With this extra space available, we feel this is a good time to request more and more material from Leica owners for possible use in the magazine, particularly black-and-white. So let us see what is being done with all those Leica cameras!

**CONTEST ANNOUNCEMENTS . . .** For those of you who are doing a great deal of work with your Leica cameras and are interested in possibly winning prizes, the following contests have recently been announced: "Moulin Rouge"—Modern Photography contest for



"Best Photo of a Street Scene." This contest opens March 1, 1953 and closes midnight September 30, 1953. Original contact prints or enlargements, black-and-white or color will be accepted. No limit on the number of entrants. Pictures which have been previously sold or accepted for use in any publication are not eligible. Full details as to how and where the picture was taken must be secured to each entry. Prize winning photographs, their negatives and all promotional rights become the property of United Artists and Modern Photography. Address all entries to Moulin Rouge Contest Editor, United Artists Corp., 729 7th Avenue, New York, N. Y. (Use this address for further details of the contest). This contest is of particular interest to us as the first prize will be a Leica IIIf with Summitar and case. The eleventh prize will be a Leica Bindomat, and the Editor of LEICA PHOTOGRAPHY will be one of the judges of the contest.

The 40th Annual Pittsburgh International Salon of Photographic Art, four prints or four color slides—fee \$1.00. Closing date for prints February 25; for slides March 4, 1953. Information and blanks—Walter F. Kneeland, 3658 Perrysville Avenue, Pittsburgh 14, Pa. This salon conforms to PSA rules for handling prints and slides.

The Fifth International Color Slide Exhibition, Berks Camera Club. Entry fee—\$1.00. Will follow PSA recommendations. Closing date April 4, 1953. For information, write to Berks Camera Club, John H. Kline, Chairman, 550 North 11th Street, Reading, Pa.

Color and black-and-white photographs are now being assembled for use in the 1954 Edition of Photography Annual. There are no restrictions as to subject matter, size or number of prints that can be submitted, and sequence or picture stories as well as single pictures are acceptable. Minimum rates of \$100 for color and \$25 for black-and-white are paid on acceptance. Entries should be sent Photography Annual Editor, 366 Madison Avenue, New York 17, N. Y., no later than May 15, 1953. Return postage should be enclosed.

**CONGRATULATIONS DR. EDGERTON!** . . . We have recently learned that the Board of Trustees of the National Geographic Society has awarded the \$2000.00 Franklin L. Burr prize to Dr. Harold Eugene Edgerton, Professor of Electrical Engineering at the Massachusetts Institute of Technology. Dr. Edgerton, whose chapter on electronic flash in the LEICA MANUAL is highly informative, receives the prize for his "outstanding contribution to the field of photography through the invention, development and perfection of high-speed electronic flash lighting equipment."

**LEICA-METER SHOE** . . . Many owners of the Leica-Meter wrote us hurriedly when they found that the Leica-Meter would not fit on top of the Inarect Finder. This problem has finally been solved so we are pleased to announce the availability of a special shoe to replace the present one on the Leica Meter. The owner can do it at home and need only write our Service Department for the shoe, which is available without charge.

All meters now being shipped have this new shoe.

**NEW BULK COLOR FILM LOADS** . . . Of interest to all 35mm. camera users who "roll their own," Ansco,

Binghamton, New York announces bulk 35mm. Ansco color film in a new 8—20 exposure load package, instead of the 5—20 exposure loads available heretofore.

In addition to a better overall price advantage, a very specific saving is offered with the 8—20 bulk load. The 5—20 exposure load was priced at \$7.68, including tax. The new 8—20 exposure load, already notched and tongued, sells for \$9.95. The cost per load in the old package was \$1.53 compared to the \$1.25 per load in the new package—representing a saving of \$.29 per 20-exposure load of film. The new 8—20 exposure loads will at first be available only in Ansco Color Daylight Film. Tungsten 35mm. will be added later on.

### BLACK-AND-WHITE NEGATIVES FROM COLOR TRANSPARENCIES . . .

A most practical and efficient method of making excellent black-and-white negatives from 35mm. color transparencies is by using the Leitz Belun 1:1 reproduction device. It will work equally well with transparencies in cardboard mounts, glass slides or on unmounted film. The transparencies are simply placed upon the opal glass surface of a viewing box. Then the Belun device, attached to a Leica with Elmar 50mm. lens, (or the Belun-Hesum for the Summitar lens), is placed over the transparency, so that the entire picture area appears within the mask, and the exposure is made. A long-scale, soft gradation panchromatic film such as Ansco Supreme or Kodak Plus-X, will yield best results. Correct exposures are easily determined with a Leica-Meter placed directly over the picture area. Remember, that since the reproduction is made on a 1:1 basis, the exposure shown by the exposure meter should be increased by a factor of 4. To obtain correctly oriented prints, the emulsion side of the original color transparency must face the light source—not the emulsion of the copying film.

**PHOTO TRADE SHOW TIME** . . . Those Leica owners in and around the Chicago area will be pleased to know that the Master Photo Dealers' and Finishers' Association Convention and Trade Show will be held at the Conrad Hilton Hotel in Chicago from Monday, April 13th to Friday, April 17th. If your local dealer is out of town, that's where he will be. On Wednesday nights, April 15th from 7:45 p.m. to 10:45 p.m., the show will be open to the public. We hope as many of our Leica friends as possible will come to see us at Booth #215. ♦

**E. LEITZ, NEW YORK EXPANDS** . . . We are pleased to announce that in order to expand our repair and manufacturing facilities, the executive offices and showroom are now located at 468 Fourth Avenue, New York 16, N. Y. Please write us at this address. If you are in New York, we will be most happy to welcome you.

Service facilities are still located at 304 Hudson Street, New York 13, N. Y.; if Leica equipment is mailed in for repair, it should be sent to the 304 Hudson Street address. If you want to deliver your Leica equipment personally, please bring it to our showroom.





# THE INAUGURATION BY ALFRED EISENSTAEDT FOR **LIFE** MAGAZINE



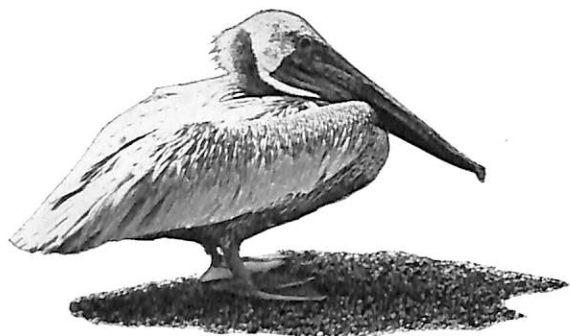
*Top*—Telyt 400mm. 1/100 of a second at f/8.

*Upper left*—Summaron 35mm. 1/100 of a second at f/5.6.

*Lower left*—Summaron 35mm. 1/60 of a second at f/5.6.

*Right*—Summaron 3mm. 1/100 of a second at f/8.





by **Desider Holisher**  
New York, N. Y.

## Leica at the Zoo

*(Editor's Note: Mr. Holisher is a photographer, lecturer, and author of several books. He has taught photography at Rutgers University, Fordham University, City College of New York, and other schools. Wild animals are his camera pets, resulting in an outstanding collection of zoo photographs taken with the Leica. Many of these pictures are discussed in his classes as instructive illustrations of photographic problems.)*

Each year the nation's zoos play hosts to millions of visitors who are fascinated by the wide variety of Mother Nature's creatures. At the zoo, camera fans are challenged to "capture" them on film. Their efforts are richly rewarded with a series of pictures that otherwise could be brought home only when roving with adventurous expeditions from the icy polar regions to the steaming jungles of the Equator.

In the press of the crowd, during the moments of fleeting action, the Leica has proved itself as the ideal camera for taking zoo photographs. My students and I have used various equipment for that purpose, but for versatility, ease of use and all-around performance, the Leica has assured the best results. The readiness to shoot quickly and the fast adjustment of the camera to local conditions are essential for taking photographs that catch the attention of people, and stimulate as well.

It is not enough to set up and shoot haphazardly for the record. If we want to secure zoo pictures with qualities above those of average snapshots, we have to observe and study our subjects before we photograph them. It is advisable to follow some guiding rules that will help us to produce pictures which disclose the difference between ineffective and striking photographs.

### Remember . . .

(A) Avoid including the enclosure in your shot. This can be accomplished by putting your lens between the bars. A word of caution: Don't put your hands and the camera into the cage because animals charge quickly if annoyed, and you might be attacked.

(B) If you want to do a serious job in photography, be patient and try to present your subject in a way that will well characterize the animal. Try to include something of the animal's personality, habits, and distinctive features.

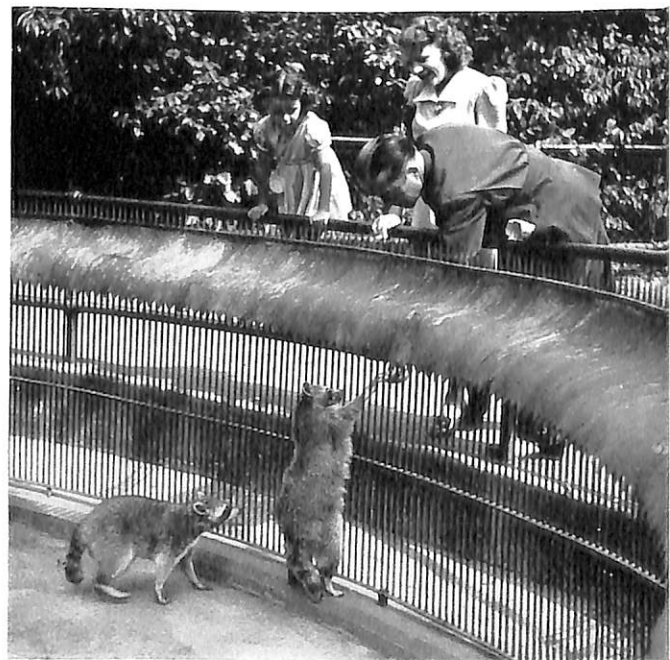
(C) Plan your pictures carefully by taking setting and lighting conditions into consideration. This advance planning will pay off and prevent meaningless snapshooting.

(D) Use flash when necessary to get unusual situations which indicate quickly vanishing poses and remarkable expressions. Even though you may do so at the Bronx Zoo in New York, check with the keepers to see if there is a particular reason not to excite the animal with your flash gun.

1



2



The accompanying illustrations show the wide range of picture possibilities and the photographic interpretation of animal life, accomplished with the Leica camera and a high-speed film.

- 1 The honey badger's fur, and animal fur generally, is the most delicate part of *texture* photography. Only a lens with high resolving power reproduces clear and sharp skin texture. F/5.6 at 1/50.
- 2 The raccoons joined a family group. Be prepared to shoot *instantly* to have natural and convincing poses when you photograph people with animals. F/8 at 1/200.
- 3 The Himalayan tahrs on the hill invite you to take effective pictorial shots. The lens has excellently registered the *tonal scale* of light and shadow with details in the dark areas, as the exposure 1/75 at f/8 was made for the darkest parts in the picture.
- 4 The Indian mongoose photographed through the glass plate of its cage. Small and lively animals at close distance call for the shortest possible exposure. The *wide-open lens* with f/3.5 has assured this crisp picture. Note the sparkling catchlight in the eye of the mongoose. The exposure was 1/200.
- 5 From edge to edge, the broad expanse of the natural habitat must come out sharp if you use the *depth of field scale* correctly. This helpful device of the Leica indicates which area is in focus at various lens apertures and focusing distances. F/11 at 1/75.
- 6 The African warthog and its food were only eight feet from the camera. A large amount of light and a small lens opening were needed for the good definition of the objects in the crowded foreground. The *flash gun* solved the problem. Taken with Press 40 bulb at f/16 and 1/100.
- 7 The *close-up* of the South American condor is dramatic and fitting the big bird of prey. It is topically revealing and technically faultless, though taken from close distance at f/5.6 and 1/200.
- 8 *Speed* is what counts when you want to catch the snakebird with spreading wings. The maneuverability of the Leica facilitates the recording of a swiftly passing pose that otherwise you might miss. F/4 at 1/500.
- 9 *Composition* easily controlled through the viewfinder was decisive for capturing this unusual expression of friendship. The direct rangefinder-viewfinder combination has simplified instant composition and quick focusing. F/11 at 1/100.

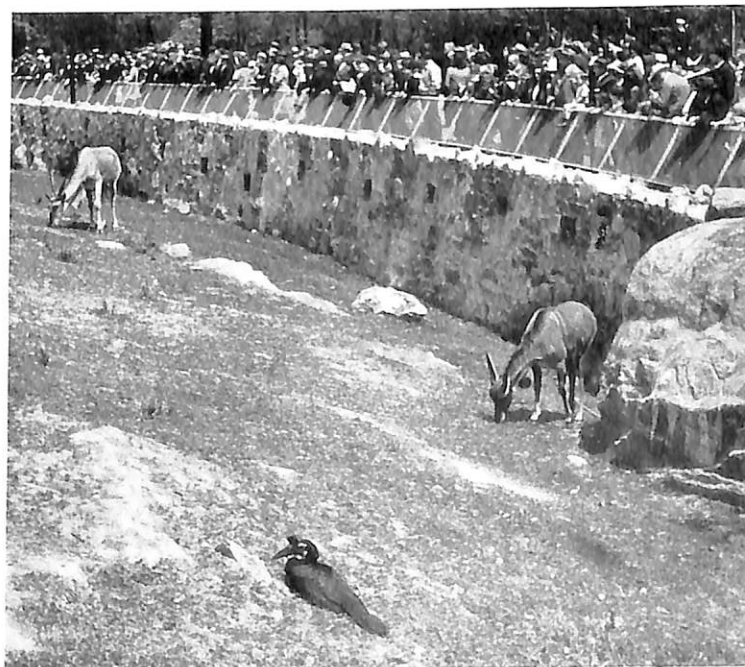
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4



5







6



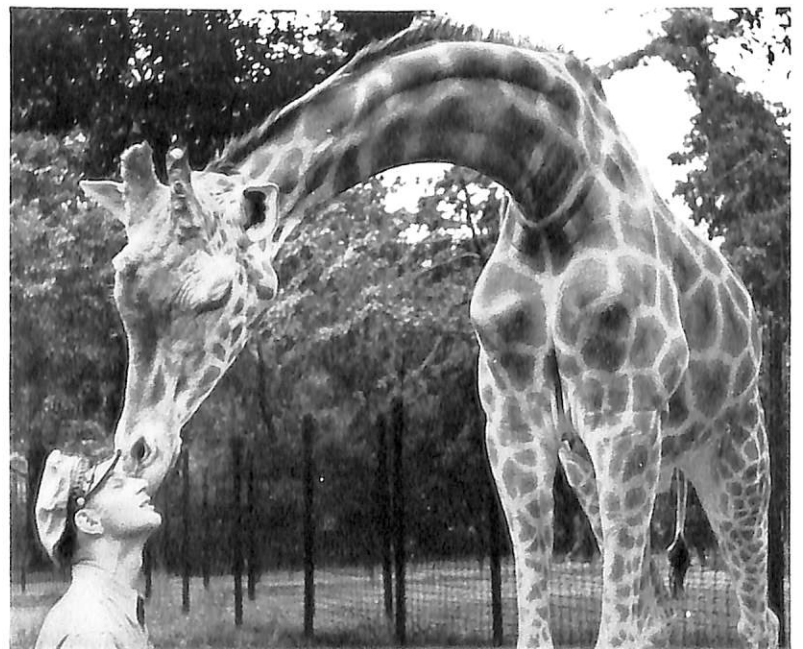
7

To the reader  
it may appear that my pictures  
were taken with several Leica lenses,  
yet I have preferred  
to utilize only  
the Elmar 50mm. f/3.5 lens  
in order to simplify my technique  
and be prepared to shoot  
without delay as the opportunity  
presented itself.  
The Elmar lens  
has fulfilled all my expectations  
through its efficiency in  
all-around picture-taking  
at the zoo. I did not miss  
the advantage of faster lenses,  
for, during the day,  
there is enough light for  
an f/3.5 lens opening.  
It is possible to use faster lenses  
in less light, but for sharp  
animal photographs wide  
aperture results are not the  
most satisfactory,  
especially when the subject  
is close to the camera  
and we are striving for  
sharp pictures. In the darkroom,  
I enlarge the important portions  
of the negative for the  
best possible print. ♦

8



9



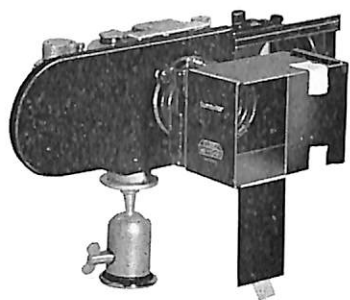


Figure 1

## "TWIN" SHOOTING WITH YOUR LEICA

by David Danziger  
Overseas Staff, The Stars & Stripes

The Summar lens shade, because of its rectangular shape, lends itself to use as a matte box. With a suitable mask attached to the front of the shade, pictures can be taken through openings of various shapes—hearts, keyholes, etc., giving prints which shade into black, as opposed to the white outlines which result from using masks in contact printing or enlarging.

An interesting application is to take "twin" pictures with the subject appearing twice in the same scene on one negative. It only involves cutting a split mask from thin, opaque plastic or metal. For the pictures shown here, black plastic less than 0.5mm. thick was used and the rear surface dulled with fine sandpaper to avoid possible reflections.

The long dimension of a paper rectangle, 56x80mm., is divided into two unequal parts, one 36.5mm. and the other 43.5mm. Mounting the parts on the front of the shade (with adhesive tape), with the wider cover on the right, will put the division directly on the axis of the lens, since the lens opening of the shade is not centered. The covers should be mounted in the same position as they were before being cut apart so that they will butt properly.

With the subject to one side of the scene, not too close to the center, drop the corresponding cover and make the exposure. Then move the subject to the other side of the scene and replace the first cover. Make sure the edges touch properly and drop the other cover. The shutter is then rewound and the second exposure made (to rewind the shutter, keep the shutter-release button depressed and turn the shutter-speed dial counterclockwise until it clicks into its original setting. Lift finger from the shutter-release button to be ready for the next exposure.) Fig. 1 shows the set-up for the right side of the scene. A sturdy tripod is necessary because rewinding the shutter and the changing of covers must be done with the greatest care. Light conditions must be the same for both exposures, and no object which will be common to both parts of the scene should be permitted to move.

A word about the lens opening. At  $f/2$ , about two-thirds of the negative is exposed each time, a good part being vignetted and representing the out-of-focus image of the free edge of the cover. The second exposure has an equal, and opposite, amount of vignetting resulting in an evenly exposed negative. If your subject, includ-

ing its shadow, should overlap this incompletely exposed portion, that part of the subject will appear transparent after the second exposure. Unless you're out for ghost effects keep your lens opening as small as possible so that your subject can be close to the center of the scene to heighten the effect.

With animals (Fig. 2) or children it is useful to have a prominent stationary object, such as a tree, in the center as a precaution against the subject moving out of position.

For the special effect in Fig. 3, it was necessary to compose on the ground glass of the Focalslide. A king-size cigarette was impaled on a wire (hidden behind the head) which was securely attached to the fence in the background. The cigarette, since it appears in both halves of the picture, had to be kept absolutely still. The observant reader will notice that the mouth doesn't quite touch the end of the cigarette because of the risk of jarring it. The middle of the cigarette was centered on the ground glass and the exposure made at  $f/16$ . Since neither the lighter on the one side nor the nose on the other is transparent, it shows clearly that the vignetted area lies wholly between them. With the Focalslide, because the lens turns when focusing, it is necessary to focus before attaching the lens shade.

This "fun" photography is facilitated due to the flexibility and ease of operation of my Leica equipment. Try it for a novel approach to photography! ♦



Figure 2



Figure 3





by John Gore, Editor, THE GEAUGA RECORD  
Chardon, Ohio

Weekly small-town newspaper editors in the United States are worried over the growing competition from nearby metropolitan dailies. Better transportation facilities take local customers to the big city to shop so advertisers urge the metropolitan papers to expand their circulation into the weeklies' bailiwick. The answer to such competition is the increased use of pictures by the weeklies. But what about the cost?

Few weeklies can afford to make their own zinc or copper plates; buying them outside means early scheduling (with a loss of current interest) and the cost is beyond the normal budget. I am convinced that a weekly can meet the competition and mounting production costs by using Leica equipment for its pictures and a Fairchild Scan-a-Graver, a new machine, which cuts engravings out of plastic plates in a matter of minutes.

Briefly, a small Scan-a-Graver can be rented which is specifically designed for the weekly paper. A publisher can make all the engravings he wants (85 line screen) which will be excellent for the paper and for his commercial printing department. But use of this machine presents two urgent problems for which Leica equipment comes closest to the perfect solution:

(1) The publisher pays a fixed monthly rental regardless of the number of pictures used. Therefore, the maximum utilization depends on the number of pictures the paper prints—far more than the conventional press camera can produce in weekly newspaper operation.

(2) The Scan-a-Graver neither enlarges nor reduces. Pictures must be made to intended size of reproduction.

Here's how we of THE GEAUGA RECORD have been convinced that our picture problem is best solved by Leica. About three years ago, I started taking pictures because the competition was hurting. I experimented with various cameras; I hired local photographers; I tried to encourage local amateurs to submit pictures, but I became my own best photographer be-



Advertising photo for appliance store ad

cause the professional wasn't always available and the amateur's results were unsatisfactory.

When I used a big camera, people "froze up" and when I went to a local fish fry, laden with equipment, the ticket seller called out "Hey, everybody, line up over by the wall. John is here to take our picture for the paper." I came away convinced that I was certainly using the wrong equipment.

My father, an old-time feature writer and photographer, solved my problem by giving me his 22-year old Leica. For my purposes it worked wonders and did my job so much better than other cameras that I now own a Leica IIIf, Summarit 50mm lens for important natural light photos and flashgun.

The Leica is ideal for taking all regular newspaper photos and, as you acquire skill, it can take many pictures that only a 35mm. camera can "create." This is important because the photographer for a weekly paper has problems which are different from those on a daily, and these special requirements must be considered when buying a camera.

(1) *Portability:* The weekly's photographer doesn't just go out on specific assignment. He sells ads, writes news, works in the shop. His equipment must always be available but inconspicuous.

(2) *Multiple Number of Pictures:* A weekly needs many pictures to pay the rent on its Scan-a-Graver. Today, we publish a series of pictures rather than one shot. Constant loading and reloading a camera with large negative material is too slow and too expensive.

Advertising photo for lumber company ad





Human interest photo of town library

(3) *Economy*: A weekly's equipment must be inexpensive to operate. By buying 100 ft. rolls of 35mm. and loading them in Leica cassettes, you can shoot 36 pictures at a time for a fraction of the cost of larger materials.

(4) *Efficient Processing*: A weekly needs dark room equipment that will process pictures quickly and efficiently. Usually, I work from a complete roll rather than a single negative. My Focomat Ic permits me to make one, two, three or four column prints without focusing each negative because of its autofocus feature.

(5) *Simplicity of Operation*: Since most weekly paper photographers are inexperienced, it is gratifying to have simple instructions which permit you to take satisfactory pictures from the start.

(6) *Unlimited Use*: You can expand with a Leica because of its interchangeable lenses and numerous accessories. But wait until you've mastered your equipment before "reaching out" for new worlds.

This article may well give rise to many of the objections aired by press cameramen so I'll answer them here.

*Objection: "I need the big negative to have room for cropping, to enable me to make big enlargements when needed and to get sufficient detail."*

*Answer*: Cropping, with any camera should be done as you aim the camera. Compose properly—don't figure on cropping later. Excessive cropping is an emergency measure.

Big enlargements from Leica negatives are no problem if your work is clean and accurate. A newspaper

picture is usually two columns wide (4") by six inches deep—a 3 to 4 time Leica enlargement. So "big" enlargements aren't needed. Grain is not objectionable from a practical newsman's standpoint because the finest newspaper engraving process is going to make grain (because of the screen) in your picture far beyond any in the print.

The same holds true for detail. The Leica lens renders plenty of detail but newspaper reproduction won't bring out much of the detail of your final print—more often a picture with great detail ends up flat in tone when reproduced. I get a better final product by exaggerating lighting contrast slightly to compensate for the graying effect of halftoning. Fine detail photos often reproduce as gray smears on the average newspaper press.

*Objection: "I can't get a single picture out in a hurry when I need it."*

*Answer*: Such an emergency is rare on a weekly. I rehearsed unloading, snipping a single frame and reloading in the darkroom for such an emergency, and I haven't used it for three years so far. Normally, I load a roll of 36 at the beginning of the week—often it lasts the entire week. If I change rolls and have exposures left on the roll at the end of the week, I take record shots for my "future use" file. I also can "release" new type shots I've never taken. One such group, of children playing, taken last summer became almost priceless to a local family. In the fall, one of their children strangled on a toy and I provided them with the only pictures ever taken of the child. The looks on the parents' faces was worth the full cost of my Leica.

The most important feature of the Leica, to me, is its ability to *make money* for the weekly owner. Here's how we did it—by selling pictures for ads in the paper.

The local grocer ran a series of ads showing pictures of the butcher cutting meat, the delivery boy carrying out a lady's package, the men at the fruit counter. I laid them out in four column ads (the store had been using three). They knew the ad was bigger and I told them it could be reduced, but the pictures sold them the bigger space—a competitor lost some business.

An appliance dealer asked for photos of folks using their stoves and refrigerators. (*People are essential in all local pictures.*) The appliance dealer worried over the cost because of his cooperative budget allowance—final result—distributor approval for larger space each week since.

There is one final job a Leica will do for a weekly newspaper publisher. One of the great thrills in this weekly paper business is that our papers serve as a community record. We enjoy painting a picture of the town and country we serve; we enjoy glorifying our home town and our people—we make them feel important and worthwhile; we give them a recognition in words that they need and deserve, and it gives us a thrill to do so.

Keep working with your Leica and someday you may find that you have snapped your shutter on a commonplace incident which will come out of your developing tank as a powerful, dramatic picture of small town America. It may be a person or thing that you've known for a long time which your eye and camera have preserved as a thing of beauty. Some day I hope my Leica and I shall be privileged to take such a picture. ♦



Human interest photo of county fair





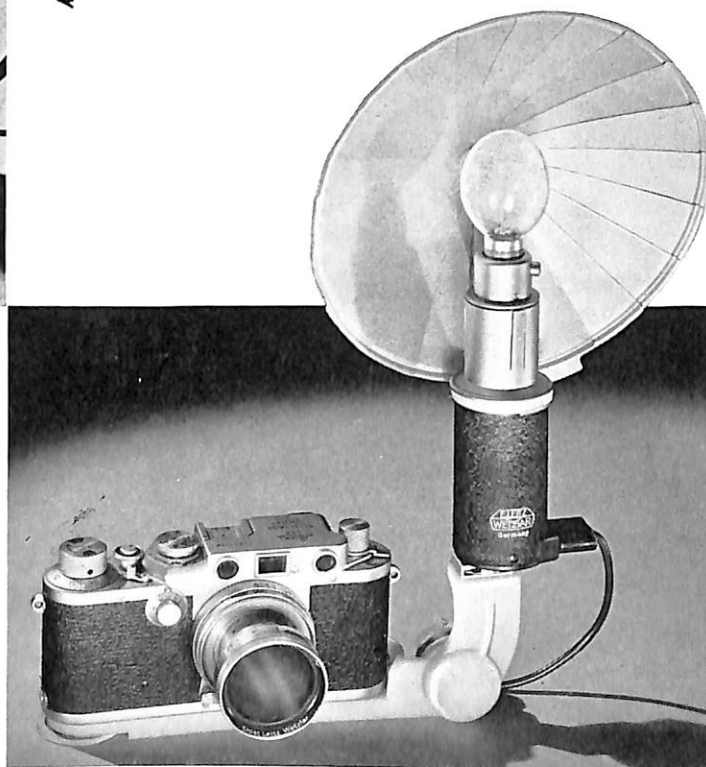
The new Leica If, which replaces the discontinued Ic, has built-in flash synchronization as in the Models If and If. It also has a 50mm. optical finder, a winding knob with a "memory" and the Elmar 50mm. lens (which now has a depth-of-field scale on the lens flange in red and the distance scale on the lens mount for greater convenience). Code word OEINO, catalog No. 10,010, priced at \$151.30.

# Leica NEWS

ACCESSORIES NOW IN PRODUCTION

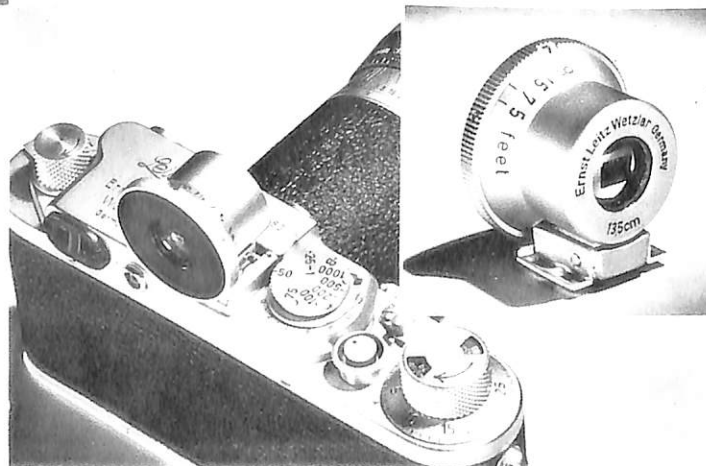


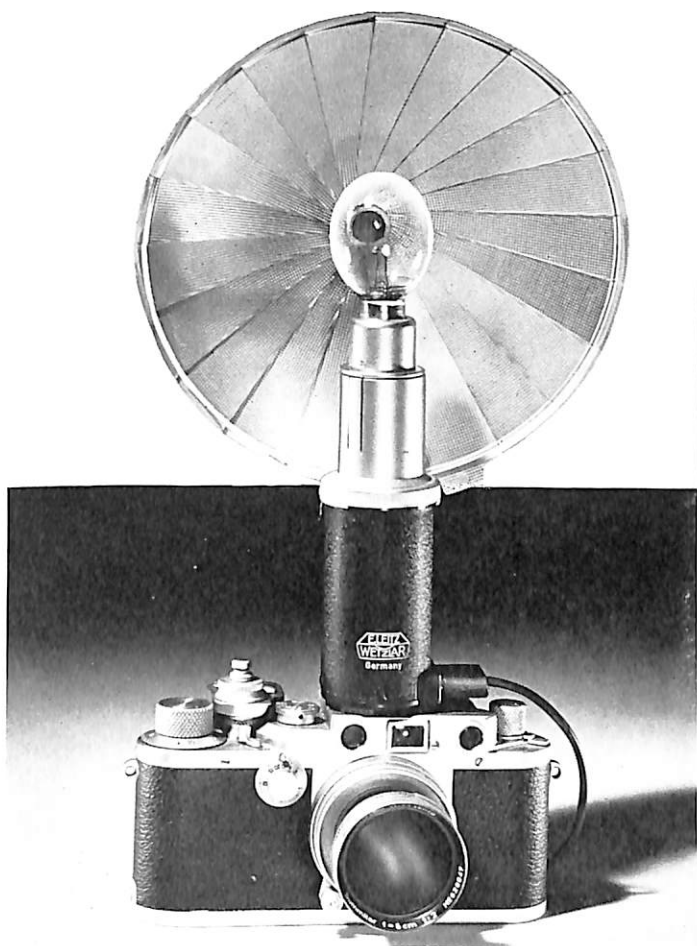
The newest addition to the brilliant optical view finder line is the one for the 135mm. lens, which has a click stop parallax adjustment, enlarged diameter sighting eyepiece. Code word SHOO, catalog No. 12,030, priced at \$15.00.



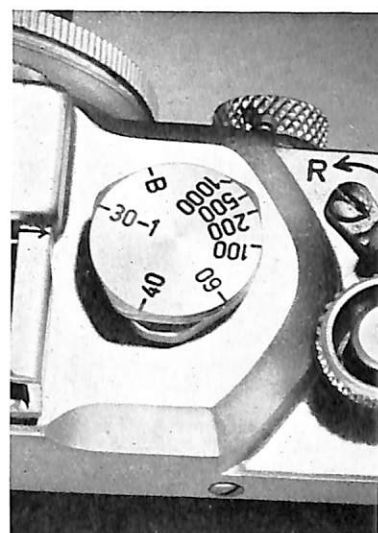
Here is a long awaited accessory which has just gone into production—the angle bracket for the If flash gun. The flash unit slides into an accessory clip on the bracket and can be rotated 180 degrees and used horizontally or vertically. Code word CTOOM, catalog number and price to be announced later.

For the owners of the 200mm. or Hektor 135mm. lenses and reflex housing, we have a new holster-type carrying case with carrying strap. Code word EMTOO, catalog No. 14,585, priced at \$24.00.

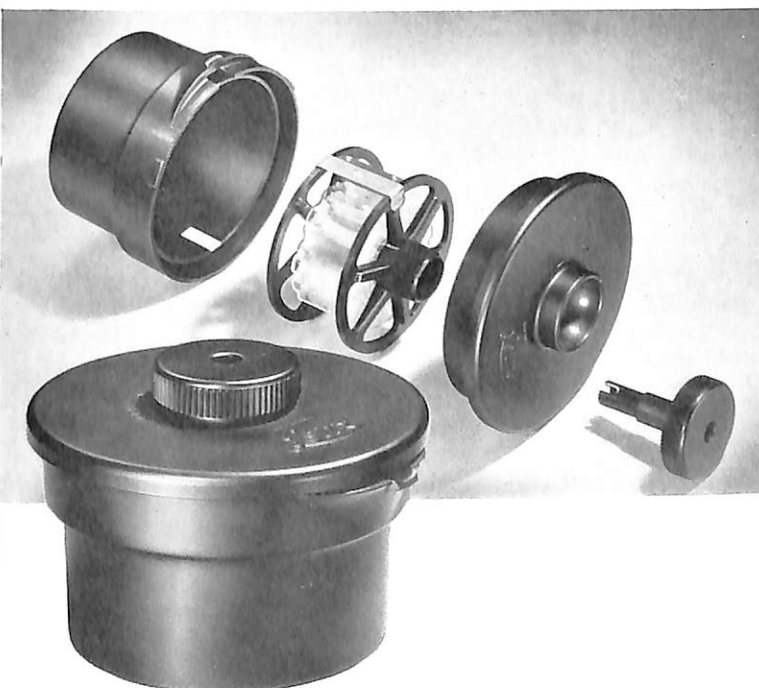




Introducing the Correx Developing Tank, junior size, (code word CODRO, catalog No. 15,055, priced at \$6.00), for obvious economy when only *one* film is to be processed. This tank is similar in construction to the 16 oz. Correx but has a capacity of 12 oz. (310 cc).



▲ The new CAVOO flash unit for non-synchronized Leica cameras, same type unit as for the If, Iff, and Iflf, plus external synchronizer operated by shutter speed setting dial, including special speed setting dial with fixed contact points, synchronization limited to 1/100 sec. using long peak flash bulbs. There are six different speed dials available, depending upon serial number of camera. Code word CAVOO, priced at \$33.00.



▲ The previously announced 4x Magnifier (45° angle) which presents the image erect and in correct left to right orientation, will be available soon for use with the Mirror Reflex Housing. This facilitates the hand-holding of long-focus lenses. Code word PEGOO, catalog No. 16,725, priced at \$45.00.





by Jack Reid, Los Angeles, Calif.  
 Courtesy of Dr. John F. Pick, Chicago, Illinois

In surgical photography, the axis of the camera should approximate the axis of the surgeon's line of vision at a distance of three to four feet. The photographer should station himself to the left of a right-handed surgeon with his strobe light above and slightly to one side.

## SURGICAL PHOTOGRAPHY WITH THE LEICA

The need for surgical photography is pre-eminent in plastic surgery. Photographic records of patients and procedures are indispensable for scientific as well as medical-legal reasons. During World War II, this specialty, and the number of doctors engaged in it, rose tremendously. Hence, professional and advanced amateur photographers are being called upon to record the more important and valuable subjects in this field. In general, sequence color photos are desired and they are used for (1) an accurate and understandable record of operation, (2) visual education in medicine, (3) exhibit of material, and (4) medical-legal purposes. Since plastic surgery is still in the development stage in many respects, and since almost every plastic surgeon in time develops his own techniques, the increasingly widespread use of photography in this specialty is understandable.

For formal purposes elaborate set-ups, generally involving close-ups made directly over the operating table, are used. However, such a procedure requires rehearsal and is too expensive and time consuming to be used in any but the most exceptional cases.

The use of the Leica camera, its related equipment and a good strobe light, on the other hand, permits an effective technique which is simplicity itself. It does not unduly impede the progress of the operation and requires only a bare minimum of medical knowledge on the part of the photographer.

The basic equipment required is the Leica with one or more accessory lenses, the strobe cord, an Imarect Finder and a strobe unit, preferably of 200 watt seconds

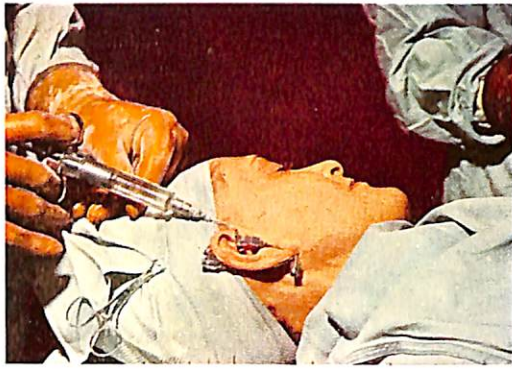
or better, which is equipped with a rolling boom stand. A number of such stands are manufactured. They are easily portable when folded and disassembled. The length of the boom need not exceed four feet.

The axis of the camera lens ought to approximate, as closely as possible, the axis of the surgeon's line of vision. Hence the photographer is usually placed to the left of a right-handed surgeon or, conversely, to the right of a left-handed surgeon. The single light is placed above and slightly to one side of the photographer. By hanging the light on a boom it is more easily maneuvered and the stand is well behind the operating field. The technique of lighting is to obtain maximum modeling while at the same time taking care that no shadows cast by the hands or instruments obscure the important parts of the subject being photographed.

It is desirable to cover an area which will show the part of the body being operated on plus the position of the hands of the chief and assistant surgeons. The 90mm. Elmar lens is usually satisfactory from a distance of  $3\frac{1}{2}$  to four feet, but a quick look through the Imarect Finder before the operation begins will indicate the most appropriate focal length.

During the operation the chief surgeon will tell the photographer when to photograph. An occasional minute adjustment of the position of the light is generally the only change which will have to be made from one picture to the next. Every effort should be made to take all the pictures from the same position so that they will all be properly related. In time, the photographer should become sufficiently familiar with his equipment





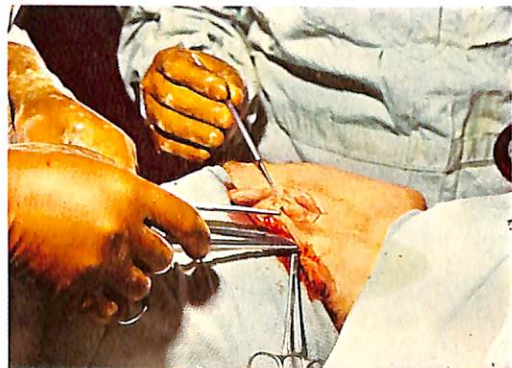
1

This is a "face-lifting" operation. Novocaine is being injected as local anesthetic. Note that seven long needles are placed into the face. Anesthetic is injected through all of them.



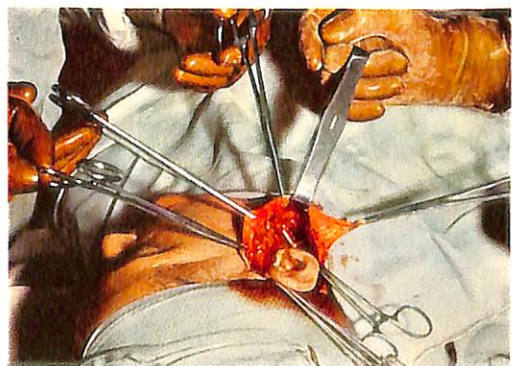
2

Novocaine being injected as needle is withdrawn. Note novocaine under skin of cheek.



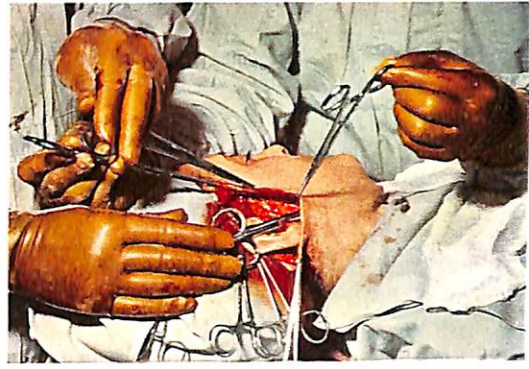
3

Starting operation. First cut is made in hairline back of ear.



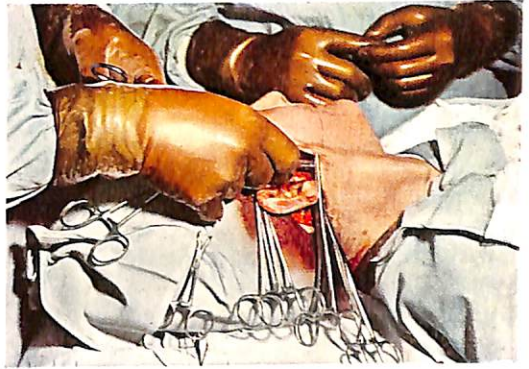
4

Skin of neck from back of ear is tunnelled deeply. Note important nerve of neck carefully spared by surgeon. Change of angle here is needed to show size, shape, depth of tunnel and nerve in neck.



5

Incision brought in front of ear. Note extensive tunnelling of neck by position of scissors.



6

Final tunnelling of neck down to collar bone. Elevation of skin of neck is caused by surgical instrument.



7

After tunnelling of cheek tissues, skin of neck is pulled up over ear to the amount which will be cut away.



8

Skin of face and neck being fitted around ear with two wire stitches tied over buttons. Operation is complete. Same operation will now be performed on other side of the face.



so that no more than one shot of each scene will be required, but at the beginning it is well to shoot at several apertures. Remember that the shutter must be set at the fastest speed on the slow speed dial so that the full shutter opening is used. On the later model Leica cameras this is  $\frac{1}{25}$  of a second.

It may seem to the reader that because of the slow shutter speed being used the color of the light from the operating lamp and stray daylight are apt to upset the color balance of the photographs. Generally speaking this won't happen, but in some cases it may; for instance, where a weak strobe light is being used in combination with a strong operating room light. Since daylight film is used, a large amount of daylight present should only call for a slightly decreased lens opening. In any case, an accurate check can be made with the photographer's light meter and any one of a number of pyrometers which are made to indicate color temperature. The procedure is to first measure the amount of incidental light with the meter and to determine what percentage of the total exposure it will constitute. Then measure its color temperature with the pyrometer. The difference between the color temperature of the incidental light and that of the strobe will have to be corrected in the same percentage (already determined with the light meter) that the incidental light constitutes of a proper exposure. However, since most operating room lights approximate daylight, the difference will be small. The writer uses a set of red-orange and blue-green filters graduated in degrees of 200 Kelvin units. Rapid calculations, which are possible on a pocket slide-rule, are accurate enough for this application.

The accompanying photographs were made with the equipment and routine outlined above. They were taken for Dr. John F. Pick of Chicago, Illinois, an eminent plastic surgeon and author of several texts on the subject.

It may be well, at this point, to add more than a few words about "cleanliness" and safety in the operating room. The term "operating zone" is used to denote an area of about two feet radius around the incision in all three dimensions. In no case should the photographer or his equipment come within this sphere. Although the cameraman will be dressed in a sterile cap, gown and mask, as are other operating room personnel, he should make certain that he is free from a contagious or infectious disease, that he does not have excessive dandruff or a cold and that his shoes are not muddy. Any talking should be done with the head turned so that one's breath does not reach the operating zone. When the target is under three feet, the mask must not only cover the mouth, but the nose as well. This is standard operating room requirement; law which must never be broken. Operating room sanitation is exacting, but to a person with reasonable common sense it should create no undue difficulties.

Any equipment which projects over the operating table must be covered with a sterile cloth so that only the necessary parts, such as the lens on a camera, are uncovered. For this reason it is better to use a strobe light of the sealed beam variety rather than one equipped with a large reflector or other projecting parts. The power cable should be taped to the boom so that there is no chance of its dangling over the operat-

ing zone. This, too, must be covered by a sterile sheet.

Incandescent lights generally involve considerable heat and pull a good deal of power from the operating room lighting circuits. Thus, the strobe light is preferable not only from a photographic stand point, but also to reduce discomfort and the possibility of blowing a fuse while the operation is in progress. Moreover, all gases used for anesthesia have the property of being volatile. Cyclopropane is one of the most explosive of all. Such gases can be set off by an electric spark. Almost all states have laws forbidding the use of any equipment in the operating room which could possibly cause an explosion, but the photographer must remember that by using faulty or improper equipment he is endangering his own life in addition to the lives of everyone else present.

There are two types of strobe lights in general use today. One features gas enclosed in the flashtube at low pressure and fires by making direct contact between the tube and the capacitors. The other type embodies gas contained in the flashtube at a higher pressure and fires by ionizing the gas with a high voltage charge in order to render it conductive. Since the current in the high voltage trigger circuit of the latter unit is limited to about 20 miliamps and the contact is made within the relatively airtight Leica camera, the possibility of spark ignition is virtually nonexistent. In the low pressure unit full voltage and current must pass across the contactors. From a standpoint of safety, only the high pressure units should be used where anesthetic gases are present in the atmosphere. This is, of course, not a consideration where local or intravenous anesthetics are being used.

In this regard, it is also appropriate to mention that even in the best strobe unit all connections ought to be checked for tightness, particularly in those parts of the circuit where full condenser power will flow. The cord connecting the power pack to the A.C. outlet should have molded rubber plugs and it is well to arrange it so that even if it is subjected to a heavy strain, like some one tripping over it, the wires will not be pulled out of the plug so as to cause an arc. Even the best homemade strobe unit is apt to arouse the suspicions of the anesthetist, who's responsibility it is to see that no equipment used in the operating room is likely to cause an explosion.

Plastic surgeons are craftsmen of the highest order and, as such, recognize that there is a good deal more to photography than merely pushing the release button on the camera. They will tend to overestimate the difficulties of photography under clinical conditions. As a result, they are apt to be much more appreciative of good results than the average person and, consequently, much more understanding of failure. Notwithstanding, a photographic failure in an operation may be, and often is, a tragedy. There are several reasons for this, the most obvious of them being that once an operation is finished, it can never be redone for the benefit of an unsuccessful photographer. Finally, a valuable and important record has been missed.

The main thing is to develop a sure and simple technique and stick to it. With the Leica it is possible to achieve the best possible results with the minimum of interference with the operation. ♦



## REPRESENTATIVES AND THEIR TERRITORIES

To help you better understand, and use, your Leica equipment, we welcome this opportunity to introduce our representatives in the field, who will be putting on store demonstrations and lecturing to camera groups; making a real effort to better acquaint the public with all of Leitz products (if your camera club wants a lecture please contact our Leica Division in New York—not the representative).

During the year, we plan to expand our staff of qualified experts. You will have an opportunity to meet the Leitz representative in your area sometime during the coming year.

This staff is under the direction of Mr. E. G. Keller, Vice-President—Sales, a lifelong Leitz man. Mr. Keller was with Leitz, London in 1935 and has been with Leitz, New York since 1936; sales manager since 1948.



### GEORGE V. MORAN

Senior Leica salesman has been with the company since 1928. He covers New York City and its metropolitan area.



### CHARLES STERN

Newest member of the Leitz force, came to us from another camera manufacturer in January of this year. He is now Leica representative for: Texas, Oklahoma, Wyoming, Colorado, Louisiana, Arkansas.



### FRANZ REICHERT

With Leitz since 1936 and was formerly New York showroom manager. He is now selling Leica in: New Mexico, Utah, Idaho, Montana, Washington, Oregon, Nevada, California, Arizona, and parts of Texas.



### JOHN F. LUBBEN

Senior microscope salesman, started with Leitz in 1925. He covers the following territory: Connecticut, Washington, D. C., Eastern Pennsylvania, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont.



### JULIUS HUISGEN

Started with Leitz, Wetzlar, in 1924. He has been with Leitz, New York, since 1938. Contributing Editor of *Leica Photography*. Now selling Leica in: Connecticut, Delaware, Washington, D. C., Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York (except metropolitan New York), Rhode Island, Vermont, Eastern Pennsylvania.



### DONALD L. MAIN

Now specializing in microscope sales after four years with the firm. He covers the following territory: Colorado, Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Wisconsin, Wyoming.



### EUGENE C. ANDEREGG

Leica representative since 1947. Has quite an Army war record. Covers: Indiana, Kentucky, Michigan, Ohio, West Virginia, Western Pennsylvania, Tenn.



### PAUL A. STUBBS

Formerly in own microscope repair firm. He joined the staff three years ago and now sells microscopes in: New Mexico, Utah, Idaho, Montana, Washington, Oregon, Nevada, California, Arizona, and parts of Texas.



### ALFRED A. NOVICK

Joined us two years ago from a Chicago retailer. Good photo technician. He is now selling Leica in: Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Wisconsin.



### JAMES W. MCCAMONT

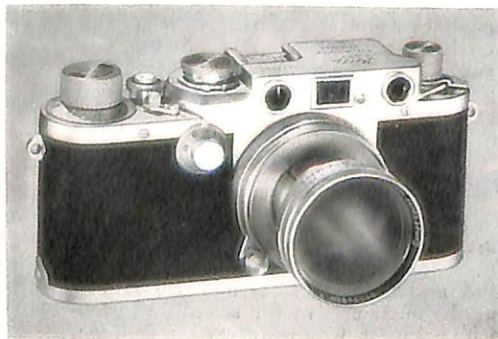
Started in our microscope department two and one-half years ago. He is now field representative for scientific instruments in the following states: Indiana, Kentucky, Michigan, Ohio, West Virginia, Western Pennsylvania, Tenn.





MACBETH...From a Kodachrome transparency by Louise S. Smith, Alexandria, Va.

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